

## DOCUMENT RESUME

ED 134 800

08

CE 009 907

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TITLE A Study to Determine the Effects of a Comprehensive and Experiential System of Vocational Guidance and Career Development on Junior High School Pupils. Final Report.  
INSTITUTION Western Kentucky Univ., Bowling Green. Center for Career and Vocational Teacher Education.  
SPONS AGENCY Office of Education (DHEW), Washington, D.C.  
BUREAU NO 498AH50098  
PUB DATE Aug 76  
GRANT G007500388  
NOTE 116p.  
EDRS PRICE MF-\$0.83 HC-\$6.01 Plus Postage.  
DESCRIPTORS \*Career Exploration; College School Cooperation; Comprehensive Programs; Cooperative Education; Educational Coordination; Educational Research; Experimental Programs; Grade 9; Junior High Schools; \*Junior High School Students; \*Occupational Guidance; Program Descriptions; Program Evaluation; Student Attitudes; \*Vocational Development; \*Work Experience Programs  
IDENTIFIERS Career Maturity Index; Kentucky (Bowling Green); School Sentiment Index

## ABSTRACT

Comprehensive work experience and vocational guidance activities were established at the middle school level and their effects on career maturity and attitudes toward school of ninth graders were tested. The project was conducted at the Bowling Green Junior High School (Kentucky) during the academic school year of 1975-76. (The school supports a comprehensive K-12 career education program; results of the study should not be generalized to school settings that do not offer a career oriented curriculum.) Experimental variables in the research design were the guidance oriented work experience component and the Life Career Development System (LCDS). The work experience component was conducted entirely on the Western Kentucky University campus. The LCDS was conducted in the junior high school utilizing joint university and public school teacher facilitation efforts. The Career Maturity Inventory (CMI) and the School Sentiment Index (SSI) were administered to all experimental and control subjects. Data was collected and reported from sponsors, students, parents, and teachers. Conclusions and recommendations were made based on empirical findings, programmatic results, and subjective observations. In general the study was viewed as a success, the major recommendation being that decisionmakers and curriculum specialists at State and local levels strongly consider implementation of career work experience programs for the junior/middle school as a major vehicle for sound curricular decisionmaking on the part of students. Appendixes comprise approximately one half of the document and include the teacher information sheet, parent information letter and permission slip, sponsor contracts, sponsor information sheet, School Sentiment Index, advisory committee abstract, agenda, and membership, third party evaluation/comprehensive guidance and abstract, agenda, and membership, work experience, and third party evaluation/LCDS. (TA)

## FINAL REPORT

Project No. 498AH50098

Grant No. G007500388

A Study to Determine the Effects of  
a Comprehensive and Experiential System of  
Vocational Guidance and Career Development  
on Junior High School Pupils

Research Project in Vocational Education  
Conducted Under  
Part C of Public Law 90-576

The project report herein was performed pursuant to a grant from the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors or grantees undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position of policy.

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August 1976

U.S. DEPARTMENT OF HEALTH,  
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## PREFACE

In order to assist in the process of improving the quality of education, educators must explore new ways of providing relevant learning experiences. The purpose of this study was to determine whether or not realistic work experience could be provided at the middle school level and whether or not those experiences were useful in improving the career selection process. The reader will find detailed statistical analysis of the many variables examined as well as narrative reports from personnel involved. The study can and should be replicated in other settings.

The study would not have been possible without the support and cooperation of the Bowling Green Independent Board of Education and the administrators at Western Kentucky University. Special acknowledgments are due: Dr. Ronald D. Adams and Mr. Larry Haffner for direction and assistance in the analysis of data; Mrs. Sara Laws, principal, Mrs. Lucy Griffin and Mrs. Erma Hunt, counselors at Bowling Green Junior High School, for their enthusiasm and cooperation in making schedule arrangements; Mr. Jack Hanel, Mrs. Betty Robertson, Mr. Don Britt and Mr. Keith Politi for their assistance in campus coordination, LCDS facilitation, and data management; the Staff Support Section in the Center for Career and Vocational Teacher Education for their excellence in coordination, management, typing and editing.

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Mr. Roger D. Vincent

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## CHAPTER I

### INTRODUCTION

"Career development theory emphasizes the importance of providing youngsters experience which enable them to identify and try on suitable work roles. Probably the richest source of these opportunities for most young people is part-time work experiences."<sup>1</sup>

This study attempted to establish comprehensive work experience and vocational guidance activities at the middle school level and to test their effects on the career maturity and attitudes toward school of ninth grade girls and boys. The project was federally assisted and locally directed in Bowling Green, Kentucky during the academic school year of 1975-76. Personnel associated with Western Kentucky University and the Bowling Green Independent School System participated in its conduct.

#### Need for the Study

Upon entering high school, students must make decisions regarding their curriculum choices which are, in a very real sense, career area choices.<sup>2</sup> Many attempts have been made to acquaint pupils with the real world of work so that these curricular choices may be accurate and valid. Most of the attempts have taken the form of books, simulations, career days, field-trips, and so forth. These activities are certainly helpful, but they are limited in that they can go only so far in acquainting pupils with the real world of work.

Vocational guidance and work experience activities were assumed to be helpful for middle school students, but a review of the literature revealed minimal programmatic efforts at the middle school level, and almost no effort of a research nature. It appeared that a real need did exist for the establishment of an experimental experiential vocational guidance program for middle school students; there was a need to know if such a program could be designed and established, and if so, what effects it would have on ninth grade students' career development.

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<sup>1</sup>Edwin L. Herr, "Unifying an Entire System of Education Around a Career Development Theme." Paper presented at the National Conference on Exemplary Programs and Projects, Atlanta, Georgia, March, 1969.

<sup>2</sup>Larry J. Bailey and Ronald W. Stadt, Career Education: New Approaches to Human Development, McKnight Publishing Company, Bloomington, Illinois, 1973, p. 363.

### General Objectives of the Study

1. To develop a comprehensive, experiential vocational guidance curricular system at the ninth grade level. Such a system would possess two major components:
  - (a) a guidance oriented work experience/career exploration program
  - (b) the Life Career Development System (LCDS) developed by Garry Walz, Libby Benjamin, et.al.
2. To test for main and interactive effects of a comprehensive, experiential vocational guidance curricular system on ninth grade pupils' career maturity and attitude toward school.

### Specific Component Objectives of the Research

#### Guidance Oriented Work Experience/Exploration Component

1. To further develop a relevant work experience/career exploration program for ninth grade students utilizing all USOE occupational cluster areas.
2. To place ninth grade students as "participant/observers" in career areas in which they have an expressed interest.
3. To facilitate the process of rational career decision making on the part of ninth grade pupils by offering career alternatives for exploration.
4. To assist in the development of desirable work habits, attitudes, and personal traits.
5. To provide exploratory work experiences such that students may move toward or away from career areas in which they believe they have career interests.
6. To test the effects of the guidance oriented work experience component relative to career maturity, attitudes toward school, and vocational interests of ninth grade pupils.

#### Life Career Development System Component

1. To implement the Life Career Development System at the ninth grade level. Specific LCDS objectives were:
  - (a) To assist individuals to increase their understanding

and acceptance of self and the relationship between self-understanding and potentially satisfying careers.

- (b) To help individuals recognize the importance of values, explore values, determine personal values, and examine the relationship of values to, and the importance of values in career planning.
  - (c) To help participants:
    - a. relate their goals to their values;
    - b. understand specific goal setting procedures;
    - c. recognize goals developed from intrinsic and extrinsic motivational sources;
    - d. learn to work with others in achieving group goals; and
    - e. recognize the importance of long range planning to career goals.
  - (d) To help individuals become aware of new work roles, changing work values, social consequences of work, and a variety of alternatives in career planning and decision making; to explore means of attaining satisfaction and meaning from work.
  - (e) To help individuals identify environmental and personal barriers in general and examine alternate ways of coping with barriers, leading to identification of barriers which confront them personally and ways they themselves can deal with these
  - (f) To help individuals understand the importance of information in career planning. Learn to evaluate information using specific criteria, and use information in planning their own careers.
  - (g) To help participants learn about factors which contribute to increased effectiveness and efficiency, enhance their listening effectiveness, and develop an understanding of the importance of effective job performance.
  - (h) To assist participants to generate viable images of the future, develop skill in social and personal forecasting.
2. To test for main and interaction effects of the Life Career Development System on ninth grade pupils.

3. To test for main interaction effects of the Life Career Development System in combination with the guidance-oriented work-experience component on ninth grade pupils.

#### Null Hypotheses

The following null hypotheses were generated: (the level of probability necessary to justify the rejection of any testable hypothesis considered in this study is .05).

(1) There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum and career decision making attitudes of ninth grade students who have not participated in a work-experience guidance curriculum.

(2) There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a Life Career Development System and career decision making attitudes of ninth grade students who have not participated in a Life Career Development System.

(3) There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.

(4) There is no significant difference between career decision making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have participated in a Life Career Development System only.

(5) There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum only.

(6) There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum and the career maturity of ninth grade students who have not participated in a work-experience guidance curriculum.

(7) There is no significant difference between the career maturity of ninth grade students who have participated in a Life Career Development System and the career maturity of ninth grade students who have not participated in a Life Career Development System.

(8) There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.

(9) There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have participated in a Life Career Development System only.

(10) There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have participated in a work-experience guidance curriculum only.

(11) There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum and the attitudes of ninth grade students toward school who have not participated in a work-experience guidance curriculum.

(12) There is no significant difference between the attitudes of ninth grade students toward school who have participated in a Life Career Development System and the attitudes of ninth grade students toward school who have not participated in a Life Career Development System.

(13) There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes of ninth grade students toward school who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.

(14) There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes of ninth grade students toward school who have participated in a Life Career Development System only.

(15) There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum only.

### Limitations of the Study

One junior high school and one university community participated in the operational work experience program. Therefore, the findings necessarily relate only to those settings. The Bowling Green Independent School System is atypical in that it supports a comprehensive K-12 career education program. The pupils who participated in this study had been involved in a career oriented curriculum (to include hands-on career exploration) for three years prior to the initiation of this project. Such intensive exposure undoubtedly affected the results to some degree and has implications relative to generalizations which can be made. This researcher is of the opinion that the results should not be generalized to school settings that do not offer a career oriented curriculum.

Western Kentucky University is also atypical in that it supports career education from both an administrative and instructional point of view. The University houses and financially supports the Center for Career and Vocational Teacher Education. It is the mission of the Center to provide direction and coordination to those phases of teacher education concerned with career and vocational teacher education. The Center accomplishes this through both internal and external research, service, development, evaluation, and instructional activities.

### Definition of Terms

Career Exploration/Work Experience Program for Middle School Pupils--A curricular program that provides middle/junior high school pupils with experiences in the world of work as non-paid participants and observers. The purpose of such a program is to provide relevant career exploration experiences not readily available to pupils within the typical school setting and to facilitate the process of rational career direction setting.

Life Career Development System (LCDS)--A system of career development designed to facilitate all aspects of an individual's life career development--educational, personal, social, and leisure time. It is designed to empower an individual with the attitudes, skills and knowledge necessary for full functional living now and in the future.

Practical Arts Education--The purpose of a practical arts program is to broaden the experience of middle/junior high school students by providing them with an opportunity to explore a diversity of career roles in order that they may be better prepared to make decisions on their personal needs and future career goals.<sup>3</sup> A practical

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<sup>3</sup>Practical Arts Education Unit, Bureau of Vocational Education, Kentucky State Department of Education, Frankfort, Kentucky.

arts program offers classes which are developed around and consistent with the occupational cluster concept.

Work Experience Sponsor--An employee of Western Kentucky University who volunteered to provide and direct work and career exploration experiences in his/her area of expertise for ninth grade program participants.

Work Experience Plan--A contractual type agreement negotiated between a volunteer sponsor and project staff member. The work experience plan outlined the experiences that would be provided for a participating ninth grade pupil in the work setting.

Satellite--A unit of approximately 120 pupils attending Bowling Green Junior High School. Each unit is composed of four homerooms which represents a stratified random sampling of pupils. A cadre of four basic curriculum teachers is assigned to each unit. Bowling Green Junior High School houses 3-1/2 eighth grade satellites and 3-1/2 ninth grade satellites.

Career Maturity--The place reached on the continuum of vocational development ranging from exploration to decline.<sup>4</sup>

Career Maturity Inventory (CMI)--An instrument constructed to measure the maturity of attitudes and competencies that are critical in realistic career decision making.<sup>5</sup>

School Sentiment Index (SSI)--A self report device which attempts to secure a student's response to statements which pertain to five aspects of attitude toward school, thereby, eliciting a global index of one's attitude toward school.<sup>6</sup>

Ohio Vocational Interest Survey (OVIS)--A vocational interest inventory designed to assist pupils in grades 8-12 to understand their vocational interests and relate them to the world of work.<sup>7</sup>

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<sup>4</sup>Donald Super, "The Dimensions and Measurement of Vocational Maturity" Teachers College Record, 1955, 57, p. 155.

<sup>5</sup>John O. Crites, Administration and Use Manual: Career Maturity Inventory (Monterey, California: CTB/McGraw-Hill, 1973), p. 3.

<sup>6</sup>Attitude Toward School K-12, (Los Angeles, California: Instructional Objectives Exchange, 1971) p. 45.

<sup>7</sup>A. G. D'Costa, John G. Odgers et al. Ohio Vocational Interest Survey Manual for Interpreting (New York, New York: Harcourt, Brace Jovanovich, Inc., 1970) p. 32.

## CHAPTER II

### METHODS AND PROCEDURES

#### Introduction

The guidance oriented work experience component and the Life Career Development System (LCDS) were the experimental variables within the research design.

The work experience component was conducted entirely on the campus of Western Kentucky University. It was hypothesized that the campus could provide work experiences for ninth grade pupils in all occupational clusters and could manage many of the barriers which normally prohibit such a program. The campus is in effect a community within a community. As such, the potential for successfully dealing with such barriers as transportation, geographic coordination, sponsor contact and recruitment was very evident.

The LCDS was conducted entirely in the Bowling Green Junior High School utilizing joint university and public school teacher facilitation efforts.

The project was conducted in three major phases. Phase I emphasized developmental efforts, Phase II emphasized implementation, and Phase III emphasized data collection, analysis, and reporting.

#### Research Design

The research design allowed the following researchable question to be experimentally examined:

What are the individual and combined effects of an exploratory, guidance oriented work experience program and the Life Career Development System on ninth grade students':

- a) career maturity
- b) attitude toward school

A multi-group posttest only control group design was utilized to investigate the research question. The use of this design allowed for the control of testing as main effect and interaction. Additionally, the effects of history, maturation, instrumentation, regression selection, mortality, and the interaction of selections and maturation were consequently controlled.<sup>8</sup>

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<sup>8</sup>Donald T. Campbell and Julian C. Stanley, Experimental and Quasi-Experimental Designs for Research (Chicago, Illinois: Rand McNally and Company, 1963), p. 13.

Because pupils attending the participating junior high school were proportionately assigned to homerooms based upon race, sex, elementary feeder school, and academic achievement (see Figure 1), the researcher assumed representation. Additionally, random assignment of experimental and control groups was employed using the cluster sampling technique to achieve randomization.

The paradigm for this design is as follows:

$E_1 \ X_1 \ 0$

$E_2 \ X_2 \ 0$

$E_3 \ X_3 \ 0$

$E_4 \ \quad 0$

Where:

$E_1$  = Randomly selected/assigned group 1

$E_2$  = Randomly selected/assigned group 2

$E_3$  = Randomly selected/assigned group 3

$E_4$  = Randomly selected/assigned control group

$0$  = Observation (test administration)

$X_1$  = Treatment (Exploratory Work Experience Program)

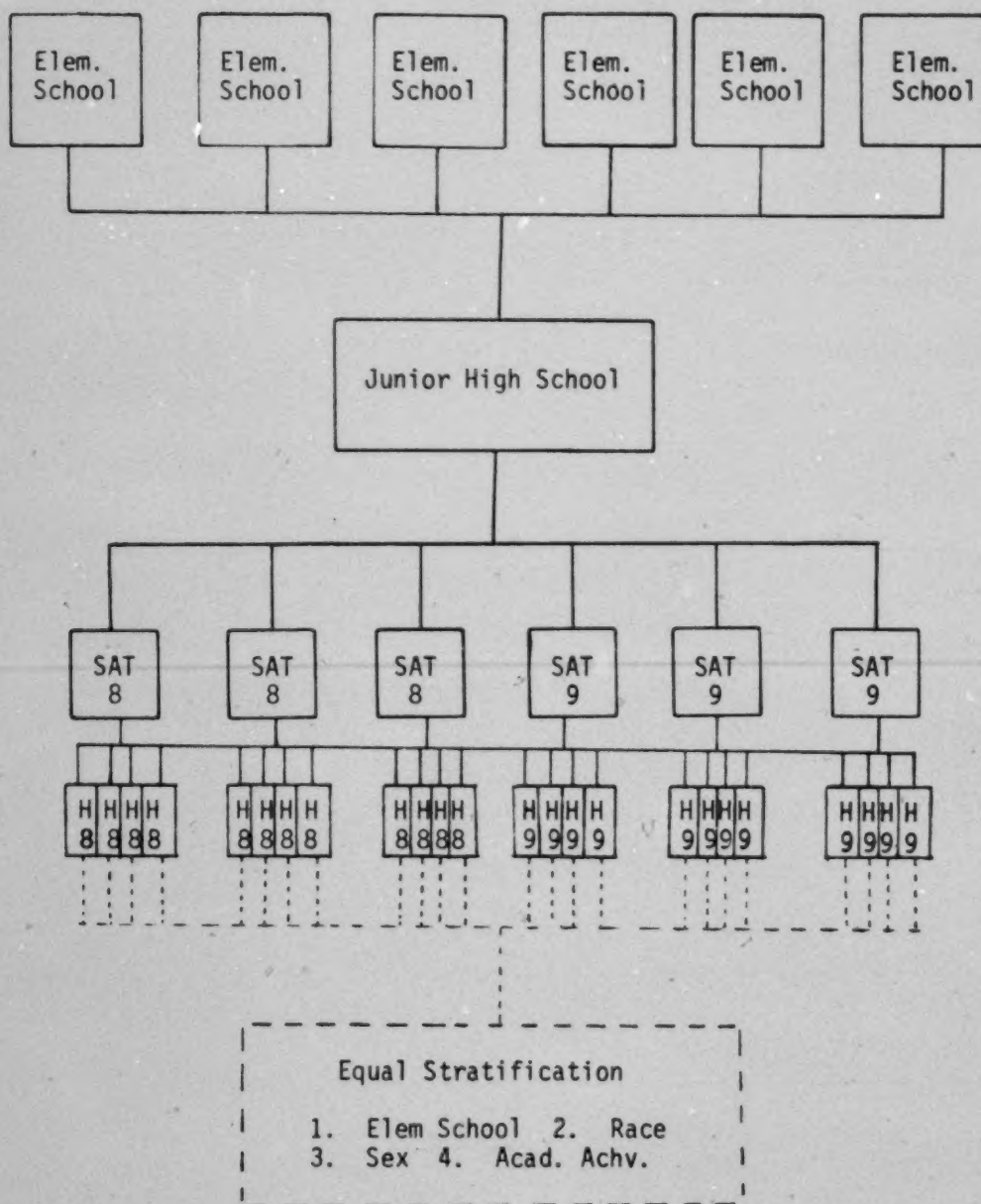
$X_2$  = Treatment (Life Career Development System)

$X_3$  = Treatment (Combination Life Career Development System and Exploratory Work Experience Program)

The Ohio Vocational Interest Survey (OVIS) was administered to all students as a part of their regular school testing program. Results from the OVIS were utilized in assessing student vocational interests for work experience placement for groups  $E_1$  and  $E_3$ . Additionally, placement was determined by small group discussions, and by the practical arts class chosen upon entering the ninth grade.

The Career Maturity Inventory and the School Sentiment Index were employed on a posttest only basis in an attempt to assess change in career maturity and attitude toward school.

FIGURE 1  
Organization of Bowling Green Junior High School



SAT - Satellite  
H8 - 8th Grade Homeroom  
H9 - 9th Grade Homeroom

## Program Preparation

### Sample Selection

One satellite (Uranus) from the ninth grade was randomly chosen. The Uranus satellite consisted of four homerooms which, for research purposes, served as intact groups. The four groups were then randomly assigned to the experimental treatments and control. Table 1 depicts this assignment.

The original total N size of the four groups was 140. Subject attrition occurring during the course of the study reduced the N-size in each of the four groups to 34 for the WK/EX group, 12 for the LCDS group, 15 for the WK/EX and LCDS group, and 29 for the control group.

TABLE 1  
Group Assignment

| <u>Group</u> | <u>Treatment</u>                                                         |
|--------------|--------------------------------------------------------------------------|
| Homeroom 1   | Work Experience Program Only (WK/EX)                                     |
| Homeroom 2   | Life Career Development System (LCDS)                                    |
| Homeroom 3   | Both Work Experience and Life Career Development System (WK/EX and LCDS) |
| Homeroom 4   | Control                                                                  |

### Teacher Orientation

The four teachers in the Uranus Satellite were provided an in-depth explanation of the program, and were given the opportunity for input concerning programmatic aspects of the study. All teachers promised their cooperation, but expressed concern over the limited number of students participating in the work experience component. See Appendix A for an outline of the teacher orientation session.

### Parental Permission

A letter explaining the program and requesting permission for their children to participate was sent to the parents or guardians of all pupils in the two work experience groups. A permission slip with a self-addressed and stamped envelope was enclosed with the letter. Participation required written parental consent and proof of school or accidental injury insurance. See Appendix B for the permission letter.

### Transportation Plan

A transportation plan was developed to transport the experimental groups of pupils from the Junior High School to the University campus. The scheduling of six round trips on six separate days was necessary.

The transportation plan called for the Bowling Green City Schools to provide one bus with a seating capacity of 70. Pupils were covered by school bus insurance carried by the school system.

A teacher of record was stationed on the bus during all pupil transportation periods. The cost of transporting the pupils to and from the University campus was minimal and the school system was reimbursed for the total cost involved.

The approximate time for loading, traveling, and unloading was 20 minutes. On work experience days, pupils left the Junior High School at approximately 8:15 a.m. and were returned by 2:00 p.m.

### Lunch Plan

Since a number of pupils in the experimental group received either free or partial-paid lunches under the Federal School Lunch Program, it was necessary to set up a similar system for the days the pupils were on the University campus.

Pupils were given the option of purchasing a sack lunch at the Junior High School or purchasing a lunch in one of the campus grills or cafeterias at regular prices.

### Parent Orientation

Prior to implementing the full-scale work experience program, a project orientation program was developed for parents of pupils participating in the work experience program. A slide depiction of the program was prepared with appropriate explanations.

### Pupil Assignment to Work Experience Stations

The treatment (work experience program) was divided into three cycles. Pupils were assigned to a different work experience station each cycle. Placement of pupils during each cycle was based on the individual's OVIS results, the practical arts area being studied at the Junior High School, and small group discussions.

### Cooperating Agency Agreement/Pupil Work Experience Plan

A standardized agreement (contract) was designed for presentation to each unit of the University which had the potential for offering work experiences for the experimental group of pupils (see Appendix C). The first part of the contract consisted of a formal agreement with the co-operating unit (university farm, hospital, weather station, etc.) to provide work and career exploration experiences for participating pupils. The second part of the agreement consisted of a work experience plan (outline) developed and agreed upon by a volunteer sponsor and a project staff member. The work experience plan outlined the experiences in which an assigned pupil(s) would participate during the time spent with the sponsor.

Prospective sponsors needed for the program and/or their supervisors were contacted by a project staff member and an appointment was arranged. During the appointment, the project's rationale and mechanics were explained. If the potential sponsor wished to participate, the work experience plan was negotiated and signed. All sponsors were provided with a sponsor information sheet (see Appendix D).

### Pupil Interview

Every pupil from the work experience/career exploration groups met with a project staff member at the participating junior high school. During this time, the pupil was given the rationale for the program and was advised concerning the work experience stations to which he/she had been assigned. The strategy for placement was discussed with each pupil and an opportunity for questions and discussion was offered. Students then selected a third work area of interest for exploration.

### Sponsor Participation

A total of 46 major sponsors or sponsor coordinators were identified and volunteered to participate in the project. Approximately 100 additional personnel from across the University served in some sponsoring capacity during the program's operation. All personnel were either part-time or full-time employees of the University and held either semi-skilled, skilled, paraprofessional, or professional jobs.

### The Work Experience

The students worked/explored three different careers spending two full days in each of the three areas for a total of six full school days. Pupils reported to their assigned sponsors no later than 9:00 a.m. each day. On the first day of a cycle, each pupil was escorted by a project staff member to his/her work experience station and was introduced to the assigned sponsor. Thereafter, the pupils were solely responsible for finding their way from the bus to their work stations and arriving on time.

Work assigned to each pupil was left to the discretion of the sponsor. Sponsors, however, were responsible for providing experiences in the areas indicated on their pupil's work experience plan. Time for lunch was agreed upon between the pupil and his/her sponsor. All pupils reported to a designated area at 1:30 p.m. for an attendance check and transportation back to the Junior High School.

When a pupil was absent from school, a project staff member contacted the appropriate sponsor as early in the morning as possible. If a pupil did not arrive at his work station and was not absent from school, the sponsor advised the project director so that appropriate measures could be taken.

The following represent the areas on the University campus to which pupils were assigned for work experience:

1. Health Occupations
  - Nursing
  - Radiology
  - Medical Records
  - Medical Laboratory
  - Pharmacy
  - Dentistry
2. Communications and Media
  - Television Production
  - Photography (film and slide development, printing, and duplicating)
  - Mass Printing
  - Audio-Visual Services
3. Physical Education and Recreation
  - Teacher Education
  - Recreation (all types; indoor-outdoor)
  - Professional Athletics
4. Biology
5. Food Services
6. Public Safety and Security
7. Business/Office and Clerical Services
8. Marketing and Distribution (various sales and service units)
9. Manufacturing and Construction
10. Computer Operations and Data Processing
11. Agriculture (University farm)

12. Legal Affairs
13. Physical Management
  - Carpentry
  - Painting
  - Electronics
  - Landscaping
  - Steam and Electrical Distribution
14. Professional Music
15. Professional Dance
16. Home Economics and Family Living
  - Interior Design
  - Textiles
  - Dietetics
  - Child Development and Family Living
17. Theatre Production
18. Teaching and Counseling
19. Military Science (to include aviation)
20. Arts and Crafts
  - Ceramics
  - Sculpture
  - Drawing
  - Painting
  - Metal Pouring
21. Engineering Technology
  - Surveying
  - Electronics
  - Sanitation
  - Material Strength
  - Machine Design
22. Postal Services

#### Life Career Development System

The LCDS was designed by Dr. Gary Walz, et al., University of Michigan. In order to install the system in a school curriculum, the local facilitators must be trained by the system's authors. Such training was accomplished by attending a three day training workshop (November 14, 15, 16, 1975). Two facilitators (counselors) from the participating Junior High and two facilitators (project staff) from Western Kentucky University received such training.

Since the dates for the facilitator training workshop were pre-arranged and were regional, implementation of the LCDS into the school curriculum necessarily occurred during the second semester of the school year rather than the first.

### Sample Selection

Two of the four randomly chosen homerooms were randomly assigned to receive the LCDS (one of these groups also participated in the work experience component). Since optimum N size for each LCDS group was 10-15 students, the N size of each homeroom was reduced from 35 to 16 subjects. This was accomplished through random selection. It should be noted, however, that all students who were band members were automatically eliminated from the LCDS groups due to unresolvable scheduling conflicts. Furthermore, subject mortality further reduced the N size to 12 in the LCDS only group, and 15 in the LCDS/work experience group (see Table 2).

TABLE 2  
Subject Attrition

| GROUP   | N <sub>1</sub> | SM* | LCDS RE** | Final N |
|---------|----------------|-----|-----------|---------|
| WE      | 35             | 1   | 0         | 34      |
| LCDS    | 35             | 4   | 19        | 12      |
| WE/LCDS | 35             | 1   | 19        | 15      |
| Control | 35             | 6   | 0         | 29      |
| Total   | 140            | 12  | 28        | 90      |

\*Subject Mortality

\*\*LCDS Random Elimination or Band Membership

### Implementation of the LCDS

The LCDS was conducted the second semester during the last period of the school day on Monday, Wednesday, and Friday of the school week. Two facilitators (one project staff member and one junior high counselor) per group conducted the 45 minute sessions. Although the original design called for full implementation of nine modules (six 45 minute sessions per module), only four modules were completed when the LCDS was prematurely terminated. This was due to negative student response to the LCDS. Possible reasons for this reaction were:

- 1) Program Selected Participants (randomly chosen)
- 2) Last period of day (fatigue)

- 3) Utilized the only study period (denied the student socializing and study time)
- 4) Inadequate facilitation

#### Posttest

The following tests were administered to the experimental and control groups following completion of the Work Experience and partial completion of the Life Career Development System: School Sentiment Index (Instructional Objectives Exchange) and the Attitude Scale and selected subsections of the Competence Test of the Career Maturity Inventory (Crites, 1973).

The method of administration and a brief rationale behind why these instruments were utilized follows:

1. School Sentiment Index (SSI)

The basic objective of the SSI (see Appendix E) is to measure attitude toward school. The instrument assesses five dimensions of attitude toward school, attitude toward peers, attitude toward teachers, attitude toward learning, attitude toward school structure and climate, and attitude toward the notion of school in general. Additionally, the instrument yields a global estimate of attitude toward school.

2. Career Maturity Inventory (CMI)

The basic objective of the CMI is to measure the maturity of attitudes and competencies that are critical to realistic career decision-making.

The Attitude Scale and three parts of the Competence Test were administered to the experimental and control groups. The subsections of the Competence Test which were administered to the pupils were: Knowing Yourself, Knowing About Jobs, and Choosing a Job. The entire Attitude Scale was administered.

### CHAPTER III

#### ANALYSIS OF DATA AND PRESENTATION OF FINDINGS

Two major instruments were utilized to collect necessary data to answer the questions and test the hypotheses posed in Chapter I. Those instruments were: the Career Maturity Inventory--Attitude Scale and three subsections of the Competence Test (Knowledge of Self, Knowing About Jobs, and Choosing a Job); and the School Sentiment Index. Additionally, the project staff developed four questionnaires which were utilized to collect supplemental feedback and evaluate data.

The major instruments were administered to the entire population of both the experimental and control groups. The instruments developed by the project staff were administered to the work experience subjects, parents of work experience subjects, all work experience sponsors, and the satellite teachers of all groups.

#### Career Maturity

##### Attitude Scale (Career Maturity Inventory)

The Attitude Scale of the Career Maturity Inventory attempts to measure the maturity of attitudes that are important to realistic career decision making. The dimensions assessed within the context of the Attitude Scale are: involvement in the choice process, orientation toward work, independence in decision making, preference for career choice factors (extent to which an individual bases his choice upon a particular factor), and conceptions of the choice process (extent to which an individual has accurate conceptions about making a career choice).

Table 3 presents mean attitude scale scores by sex for the experimental and control groups independently and in combination. These data show that as a whole females scored higher than did males. When the data were broken down by group and each group was evaluated separately, the mean scores for females were higher in three of the four groups. The only exception to this trend occurred in the work/experience only group. In this group, the mean score for work/experience only males ( $\bar{x} = 32.60$ ) was slightly higher than that of work/experience only females ( $\bar{x} = 30.47$ ). The mean score for the LCDS only group was the highest of the four groups ( $\bar{x} = 34.08$ ), while the mean score for the work/experience only group showed that group to be the lowest ( $\bar{x} = 31.41$ ). Control group females scored the highest of all groups ( $\bar{x} = 37.91$ ), with work/experience only females scoring lowest ( $\bar{x} = 30.47$ ).

A one-way analysis of variance was conducted, controlling for treatment groups, to test for any significant interaction when "sex" and

TABLE 3  
Mean C.M.I. Attitude Scores by Group and Sex

| Group                      | Sex | Mean  | Standard Deviation | Size of N |
|----------------------------|-----|-------|--------------------|-----------|
| Entire Population          | M+F | 32.70 | 6.86               | 90        |
| Entire Population          | M   | 31.77 | 5.87               | 47        |
| Entire Population          | F   | 33.72 | 7.22               | 43        |
| <u>Experimental Groups</u> |     |       |                    |           |
| LCDS Only                  | M+F | 34.08 | 7.12               | 12        |
|                            | M   | 32.33 | 5.82               | 6         |
|                            | F   | 35.83 | 8.38               | 6         |
| WK/EX Only                 | M+F | 31.41 | 6.76               | 34        |
|                            | M   | 32.60 | 4.29               | 15        |
|                            | F   | 30.47 | 8.20               | 19        |
| WK/EX and LCDS             | M+F | 33.27 | 7.64               | 15        |
|                            | M   | 32.50 | 8.21               | 8         |
|                            | F   | 34.14 | 7.47               | 7         |
| Control                    | M+F | 33.34 | 6.56               | 29        |
|                            | M   | 30.56 | 5.61               | 18        |
|                            | F   | 37.91 | 5.50               | 11        |

"group membership" were used as independent variables. Even though mean scores for females across all groups were slightly higher than for males, no significant interactions were found.

A one-way analysis of variance was also conducted, within each sex and across groups, to determine if any significant difference existed. Non-significant f-values were computed for both males and females. However, the f-value for females (.073) did approach significance. Inspection of mean attitude scores for females in each group indicates this difference to be between the control group and the WK/EX only group, with the control group scoring higher.

A series of analyses of variance were conducted within each group, controlling for sex, to test for any significant differences that may have occurred. Non-significant f-values were obtained for the LCDS only, WK/EX only, and WK/EX and LCDS groups. Significance at the .01

level was detected, however, within the control group, revealing males and females differ significantly in regard to the maturity of attitudes considered important in realistic career decision making. Inspection of the means show females were more advanced in the maturity of their attitudes than males. The results of the analysis are presented in Table 4.

TABLE 4  
Analysis of Variance for C.M.I. Attitude Scale  
By Sex Within the Control Group

| Source of Variation | D.F. | Sum of Squares | Mean Squares | F      | Signif. of F |
|---------------------|------|----------------|--------------|--------|--------------|
| Between Groups      | 1    | 369.1953       | 369.1953     | 11.904 | .002*        |
| Within Groups       | 27   | 837.3672       | 31.0136      |        |              |
| Total               | 28   | 1206.5625      |              |        |              |

\*Statistically significant at the .01 level

#### Competence Test (Career Maturity Inventory)

The Competence Test of the Career Maturity Inventory attempts to measure the maturity of competencies that are considered critical in career decision making. In contrast to the Attitude Scale, the Competence Test seeks to assess the more cognitive factors involved in occupational selections.

The Competence Test is comprised of five subsections. Three of these subsections were administered to all subjects in the experimental and control groups. The subsections administered were: Self-Appraisal (Knowing Yourself), Occupational Information (Knowing About Jobs), and Goal Selection (Choosing a Job).

Table 5 presents mean subsection scores by sex for the experimental and control groups independently and in combination. Consistent with the findings for the Attitude Scale, mean scores for females were consistently higher for all three subsections of the Competence Test. In evaluating the mean scores for both the Attitude Scale and the three subsections of the Competence Test across groups, a general trend appears with the LCDS only group scoring highest and the WK/EX only group scoring lowest on all but one subsection of the Competence Test (Self-Appraisal). On this subsection, the control group scored slightly higher ( $\bar{x} = 12.34$ ) than the LCDS only group ( $\bar{x} = 12.17$ ), and the WK/EX and LCDS group scored slightly lower ( $\bar{x} = 10.80$ ) than the WK/EX only group ( $\bar{x} = 10.82$ ). However, since the differences between these two sets of means is negligible,

the data remains consistent with the finding that a general trend in scoring does exist with the LCDS only group scoring highest and the WK/EX only group scoring lowest. In addition, control group females scored consistently highest, while WK/EX only females scored lowest in all but the Self-Appraisal subsection of the Competence Test. On this subsection, WK/EX and LCDS females ( $\bar{x} = 10.57$ ) scored lower than the WK/EX only females ( $\bar{x} = 11.42$ ). No group of males scored consistently highest across tests, however, control group males were the lowest scorers, again in all but the Self-Appraisal subsection of the Competence Test. In this case, the WK/EX only groups ( $\bar{x} = 10.07$ ) scored lower than the control group ( $\bar{x} = 11.00$ ).

A breakdown by sex of the scoring trends indicated by the data is presented in Table 6.

TABLE 5  
Mean C.M.I. Competence Test Subscale Scores By Group and Sex

| Subscale: Self Appraisal   |     |       |                    |           |
|----------------------------|-----|-------|--------------------|-----------|
| Group                      | Sex | Mean  | Standard Deviation | Size of N |
| Entire Population          | M+F | 11.49 | 4.45               | 90        |
| Entire Population          | M   | 10.72 | 4.35               | 47        |
| Entire Population          | F   | 12.33 | 4.44               | 47        |
| <u>Experimental Groups</u> |     |       |                    |           |
| LCDS Only                  | M+F | 12.17 | 3.49               | 12        |
|                            | M   | 11.00 | 4.34               | 6         |
|                            | F   | 13.33 | 2.16               | 6         |
| WK/EX Only                 | M+F | 10.82 | 4.79               | 34        |
|                            | M   | 10.07 | 4.43               | 15        |
|                            | F   | 11.42 | 5.09               | 19        |
| WK/EX and LCDS             | M+F | 10.80 | 5.19               | 15        |
|                            | M   | 11.00 | 5.18               | 8         |
|                            | F   | 10.57 | 5.59               | 7         |
| Control                    | M+F | 12.34 | 4.00               | 29        |
|                            | M   | 11.06 | 4.36               | 18        |
|                            | F   | 14.45 | 2.16               | 11        |

TABLE 5 - Continued

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Subscale: Occupational Information

| Group                      | Sex | Mean  | Standard<br>Deviation | Size<br>of N |
|----------------------------|-----|-------|-----------------------|--------------|
| Entire Population          | M+F | 13.34 | 5.10                  | 90           |
| Entire Population          | M   | 12.68 | 5.53                  | 47           |
| Entire Population          | F   | 14.07 | 4.81                  | 43           |
| <u>Experimental Groups</u> |     |       |                       |              |
| LCDS Only                  | M+F | 14.25 | 4.31                  | 12           |
|                            | M   | 13.33 | 4.18                  | 6            |
|                            | F   | 15.17 | 4.62                  | 6            |
| WK/EX Only                 | M+F | 12.41 | 5.49                  | 34           |
|                            | M   | 12.33 | 5.64                  | 15           |
|                            | F   | 12.47 | 5.53                  | 19           |
| WK/EX and LCDS             | M+F | 13.40 | 5.51                  | 15           |
|                            | M   | 13.63 | 5.48                  | 8            |
|                            | F   | 13.14 | 5.98                  | 7            |
| Control                    | M+F | 14.03 | 4.76                  | 29           |
|                            | M   | 12.33 | 5.17                  | 18           |
|                            | F   | 16.82 | 2.09                  | 11           |

-----  
Subscale: Goal Selection

| Group                      | Sex | Mean  | Standard<br>Deviation | Size<br>of N |
|----------------------------|-----|-------|-----------------------|--------------|
| Entire Population          | M+F | 10.71 | 4.14                  | 90           |
| Entire Population          | M   | 10.00 | 4.33                  | 47           |
| Entire Population          | F   | 11.44 | 4.07                  | 43           |
| <u>Experimental Groups</u> |     |       |                       |              |
| LCDS Only                  | M+F | 12.00 | 2.63                  | 12           |
|                            | M   | 11.67 | 2.66                  | 6            |
|                            | F   | 12.33 | 2.81                  | 6            |
| WK/EX Only                 | M+F | 9.88  | 4.60                  | 34           |
|                            | M   | 9.93  | 4.40                  | 15           |
|                            | F   | 9.84  | 4.88                  | 19           |

TABLE 5 - Continued

| Group          | Sex | Mean  | Standard<br>Deviation | Size<br>of N |
|----------------|-----|-------|-----------------------|--------------|
| WK/EX and LCDS | M+F | 11.47 | 4.66                  | 15           |
|                | M   | 10.50 | 4.57                  | 8            |
|                | F   | 12.57 | 4.86                  | 7            |
| Control        | M+F | 10.76 | 3.76                  | 29           |
|                | M   | 9.39  | 3.82                  | 18           |
|                | F   | 13.00 | 2.41                  | 11           |

TABLE 6

## Group Scoring Trends by Sex

|                                              |                |                |                       |                       |
|----------------------------------------------|----------------|----------------|-----------------------|-----------------------|
| Males                                        |                |                |                       |                       |
| Groups Ranked from Highest to Lowest by Mean |                |                |                       |                       |
| C.M.I. Test                                  | Highest        |                |                       | Lowest                |
| Attitude Scale                               | WK/EX Only     | WK/EX and LCDS | LCDS Only             | Control               |
| <u>Competence Test</u>                       |                |                |                       |                       |
| Self-Appraisal                               | Control        | WK/EX and LCDS | LCDS Only             | WK/EX Only            |
| Occupational Information                     | WK/EX and LCDS | LCDS Only      | WK/EX Only<br>Control | WK/EX Only<br>Control |
| Goal Selection                               | LCDS Only      | WK/EX and LCDS | WK/EX Only<br>Control | WK/EX Only<br>Control |
| -----                                        |                |                |                       |                       |
| Females                                      |                |                |                       |                       |
| C.M.I. Test                                  | Highest        |                |                       | Lowest                |
| Attitude Scale                               | Control        | LCDS Only      | WK/EX and LCDS        | WK/EX Only            |
| <u>Competence Test</u>                       |                |                |                       |                       |
| Self-Appraisal                               | Control        | LCDS Only      | WK/EX Only            | WK/EX and LCDS        |
| Occupational Information                     | Control        | LCDS Only      | WK/EX and LCDS        | WK/EX Only            |
| Goal Selection                               | Control        | WK/EX and LCDS | LCDS Only             | WK/EX Only            |

A one-way analysis of variance was conducted, controlling for treatment groups, to test for any significant interaction using "sex" and "group membership" as independent variables. Similar to the findings for the Attitude Scale, even though female mean scores across all groups were higher and a general trend in scoring was indicated, no significant interactions were found.

A one-way analysis of variance was conducted, within each sex and across groups, for all subsections of the Competence Test. A non-significant f-value was obtained for males and females.

A series of analyses of variance were also conducted by group controlling for sex across all subsections of the Competence Tests. Non-significant f-values were obtained for the LCDS only, WK/EX only, and WK/EX and LCDS groups. Within the Control group, significance at the .05 level was obtained for the Self-Appraisal and Occupational Information subsections; furthermore, significance at the .01 level was obtained for the Goal Selection subsection of the Competence Test. Males and females were significantly different relative to their ability to appraise personal job-related capabilities (strengths and weaknesses), how much they knew about the world of work, and how adept they were in matching personal characteristics with occupational requirements. Consistent with the findings for the Attitude Scale, inspection of the means indicate that females possessed more mature competencies in all three areas measured by the Competence Test than did males. The results of the analysis are presented in Table 7.

TABLE 7  
Analysis of Variance for C.M.I. Competence Test Scores  
By Sex Within the Control Group

| Subscale: Self-Appraisal           |      |                |              |       |              |
|------------------------------------|------|----------------|--------------|-------|--------------|
| Source of Variation                | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
| Between Groups                     | 1    | 78.8789        | 78.8789      | 5.761 | .002**       |
| Within Groups                      | 27   | 369.6758       | 13.6917      |       |              |
| Total                              | 28   | 448.5547       |              |       |              |
| -----                              |      |                |              |       |              |
| Subscale: Occupational Information |      |                |              |       |              |
| Source of Variation                | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
| Between Groups                     | 1    | 137.3281       | 137.3281     | 7.451 | .011**       |
| Within Groups                      | 27   | 497.6406       | 18.4311      |       |              |
| Total                              | 28   | 634.9687       |              |       |              |

TABLE 7 - continued

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| Subscale: Goal Selection |      |                |              |       |              |
|--------------------------|------|----------------|--------------|-------|--------------|
| Source of Variation      | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
| Between Groups           | 1    | 89.0325        | 89.0325      | 7.849 | .009*        |
| Within Groups            | 27   | 306.2781       | 11.3436      |       |              |
| Total                    | 28   | 395.3105       |              |       |              |

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\*Statistically significant at the .01 level

\*\*Statistically significant at the .05 level

#### Attitude Toward School

To measure attitude toward school, the School Sentiment Index (Secondary Level) was administered to all members of the experimental and control groups. The School Sentiment Index consists of five subscales, with each subscale designed to assess a different aspect of attitude toward school. The five subscales are based on attitudes toward: teachers, learning, school structure and climate, peers, and the notion of school in general.

A score for each subscale of the School Sentiment Index was computed for every member of the experimental and control groups.

Table 9 presents mean S.S.I. scores by sex for the experimental and control groups independently and in combination for each subscale of the test. In evaluating mean scores across all subscales of the School Sentiment Index, the data reveals that males overall score higher. The only exception to this trend occurred on the Peer subscale where females ( $\bar{x} = 13.84$ ) scored slightly higher than males ( $\bar{x} = 13.66$ ). Furthermore, the L.C.D.S. only group scored lowest on all but the Learning subscale of the School Sentiment Index.

TABLE 8

Mean S.S.I. Subscale Scores By Group And Sex

| Subscale: Teacher          |     |        |                    |           |
|----------------------------|-----|--------|--------------------|-----------|
| Group                      | Sex | Mean   | Standard Deviation | Size of N |
| Entire Population          | M+F | 96.26  | 13.99              | 95        |
| Entire Population          | M   | 100.28 | 14.72              | 50        |
| Entire Population          | F   | 92.29  | 11.57              | 45        |
| <u>Experimental Groups</u> |     |        |                    |           |
| L.C.D.S. Only              | M+F | 92.92  | 14.05              | 12        |
|                            | M   | 99.83  | 15.22              | 6         |
|                            | F   | 86.00  | 9.36               | 6         |
| WK/EX Only                 | M+F | 99.31  | 14.04              | 35        |
|                            | M   | 104.20 | 16.31              | 15        |
|                            | F   | 95.65  | 11.12              | 20        |
| WK/EX And L.C.D.S.         | M+F | 95.14  | 14.64              | 14        |
|                            | M   | 98.38  | 14.59              | 8         |
|                            | F   | 90.83  | 14.85              | 6         |
| Control                    | M+F | 94.77  | 13.71              | 34        |
|                            | M   | 99.00  | 12.47              | 21        |
|                            | F   | 87.92  | 13.26              | 13        |
| -----                      |     |        |                    |           |
| Subscale: Learning         |     |        |                    |           |
| Group                      | Sex | Mean   | Standard Deviation | Size of N |
| Entire Population          | M+F | 17.75  | 3.66               | 95        |
| Entire Population          | M   | 18.21  | 3.65               | 50        |
| Entire Population          | F   | 17.33  | 3.37               | 45        |
| <u>Experimental Groups</u> |     |        |                    |           |
| L.C.D.S. Only              | M+F | 18.17  | 4.26               | 12        |
|                            | M   | 17.83  | 6.21               | 6         |
|                            | F   | 18.50  | 1.05               | 6         |
| WK/EX Only                 | M+F | 18.00  | 3.97               | 35        |
|                            | M   | 18.73  | 3.15               | 15        |
|                            | F   | 17.45  | 4.49               | 20        |

TABLE 8 - Continued

| Subscale: Learning                     |     |       |                    |           |
|----------------------------------------|-----|-------|--------------------|-----------|
| Group                                  | Sex | Mean  | Standard Deviation | Size of N |
| WK/EX And L.C.D.S.                     | M+F | 17.71 | 2.56               | 14        |
|                                        | M   | 18.25 | 3.15               | 8         |
|                                        | F   | 17.00 | 1.41               | 6         |
| Control                                | M+F | 17.35 | 3.61               | 34        |
|                                        | M   | 17.52 | 4.09               | 21        |
|                                        | F   | 17.08 | 2.78               | 13        |
| Subscale: School Structure and Climate |     |       |                    |           |
| Group                                  | Sex | Mean  | Standard Deviation | Size of N |
| Entire Population                      | M+F | 52.45 | 7.17               | 95        |
| Entire Population                      | M   | 52.81 | 7.16               | 50        |
| Entire Population                      | F   | 51.39 | 6.46               | 45        |
| Experimental Groups                    |     |       |                    |           |
| L.C.D.S. Only                          | M+F | 49.83 | 5.15               | 12        |
|                                        | M   | 51.33 | 5.50               | 6         |
|                                        | F   | 48.33 | 3.27               | 6         |
| WK/EX Only                             | M+F | 54.09 | 6.90               | 35        |
|                                        | M   | 54.73 | 8.13               | 15        |
|                                        | F   | 53.60 | 5.99               | 20        |
| WK/EX And L.C.D.S.                     | M+F | 53.71 | 10.35              | 14        |
|                                        | M   | 55.75 | 9.62               | 8         |
|                                        | F   | 51.00 | 11.56              | 6         |
| Control                                | M+F | 51.18 | 6.21               | 34        |
|                                        | M   | 51.81 | 6.41               | 21        |
|                                        | F   | 50.15 | 5.97               | 13        |
| Subscale: Peer                         |     |       |                    |           |
| Group                                  | Sex | Mean  | Standard Deviation | Size of N |
| Entire Population                      | M+F | 13.83 | 2.89               | 95        |
| Entire Population                      | M   | 13.66 | 2.76               | 50        |
| Entire Population                      | F   | 13.84 | 3.03               | 45        |

TABLE 8 - Continued

| Subscale: Peer             |     |       |                    |           |
|----------------------------|-----|-------|--------------------|-----------|
| Group                      | Sex | Mean  | Standard Deviation | Size of N |
| <u>Experimental Groups</u> |     |       |                    |           |
| L.C.D.S. Only              | M+F | 11.83 | 1.64               | 12        |
|                            | M   | 11.50 | 1.76               | 6         |
|                            | F   | 12.17 | 1.60               | 6         |
| WK/EX Only                 | M+F | 14.91 | 3.13               | 35        |
|                            | M   | 14.47 | 3.48               | 15        |
|                            | F   | 15.25 | 2.88               | 20        |
| WK/EX And L.C.D.S.         | M+F | 14.64 | 2.65               | 14        |
|                            | M   | 14.88 | 2.29               | 8         |
|                            | F   | 14.33 | 3.27               | 6         |
| Control                    | M+F | 13.09 | 2.55               | 34        |
|                            | M   | 13.38 | 2.44               | 21        |
|                            | F   | 12.62 | 2.76               | 13        |
| -----                      |     |       |                    |           |
| Subscale: General          |     |       |                    |           |
| Group                      | Sex | Mean  | Standard Deviation | Size of N |
| Entire Population          | M+F | 28.14 | 5.46               | 95        |
| Entire Population          | M   | 29.16 | 5.25               | 50        |
| Entire Population          | F   | 26.44 | 4.83               | 45        |
| <u>Experimental Groups</u> |     |       |                    |           |
| L.C.D.S. Only              | M+F | 27.92 | 4.52               | 12        |
|                            | M   | 28.67 | 5.61               | 6         |
|                            | F   | 27.17 | 3.49               | 6         |
| WK/EX Only                 | M+F | 28.74 | 5.84               | 35        |
|                            | M   | 30.33 | 6.03               | 15        |
|                            | F   | 27.55 | 5.55               | 20        |
| WK/EX And L.C.D.S.         | M+F | 29.14 | 5.01               | 14        |
|                            | M   | 30.25 | 6.09               | 8         |
|                            | F   | 27.67 | 2.94               | 6         |
| Control                    | M+F | 27.18 | 5.58               | 34        |
|                            | M   | 28.67 | 5.62               | 21        |
|                            | F   | 24.77 | 4.76               | 13        |

A one-way analysis of variance was conducted to test for any significant interaction when "sex" and "group membership" were used as independent variables. Significance at the .01 level was detected for the Peer subscale; however, significance of .05 or less was not obtained for any of the other subscales. The results of the analysis are presented in Table 9.

A Scheffe' Test was used to determine between which groups the significant difference had occurred. The results of the Scheffe' Test reveal that the WK/EX only and the L.C.D.S. only groups differ significantly relative to attitudes toward peers as measured by the Peer subscale of the School Sentiment Index. Inspection of the means indicate that the members of the WK/EX only group possessed a significantly better attitude toward peers than the L.C.D.S. only group. The results also show a difference in attitudes toward peers also exists between the WK/EX only and control groups, with the calculated f-value approaching significance. The results of the Scheffe' Test are presented in Table 10.

These findings may be explained based on the fact that the research design employed disallowed the L.C.D.S. only and the Control groups the opportunity to participate in the "hands on" career exploration or work experience aspect of the project. As a consequence, these students might have been resentful of those who were selected to participate; this seemed to influence their responses on the peer subscale of the School Sentiment Index. Comments by the satellite teachers of each group seem to substantiate this explanation. On the Teacher Surveys administered, 100 percent (N = 4) contained comments indicating that the students not able to take part in the work experience aspect of the project felt very neglected and negative toward the situation.

TABLE 9

Analysis of Variance For Peer Subscale Of The S.S.I. By Group And Sex

| Source of Variation | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
|---------------------|------|----------------|--------------|-------|--------------|
| Between Groups      | 3    | 116.9414       | 38.9805      | 5.307 | .002*        |
| Within Groups       | 91   | 668.3672       | 7.3447       |       |              |
| Total               | 94   | 785.3086       |              |       |              |

\* Statistically significant at the .01 level

TABLE 10

Scheffe' Test For Peer Subscale Of S.S.I.

| Groups                          | Critical<br>F Value | Calculated<br>F Value |
|---------------------------------|---------------------|-----------------------|
| WK/EX Only X WK/EX And L.C.D.S. | 6.39                | .09                   |
| WK/EX Only X L.C.D.S. Only      | 6.39                | 11.57*                |
| WK/EX Only X Control            | 6.39                | 6.00                  |
| WK/EX And L.C.D.S. X Control    | 6.39                | 3.33                  |
| L.C.D.S. Only X Control         | 6.39                | 1.90                  |

\* Statistically significant difference between groups (.05 level)

A one-way analysis of variance was also conducted, within sex and across groups, to determine if any significant differences existed. For males, nonsignificant f-values were obtained across all subscales of the School Sentiment Index. Although on the Peer subscale the f-value (.089) was approaching significance. For females, a significant f-value at the .05 level was computed for the Peer subscale while on all other subscales significance of .05 or less was not detected. The results of the analysis are presented in Table 11.

A Scheffe' Test was again used to determine between which groups the significant difference had occurred. The results of the Scheffe' Test show that for females in the WK/EX only and L.C.D.S. only groups differed significantly in their attitudes toward peers. Inspection of the means reveal that the WK/EX only females scored significantly higher on the Peer subscale than the L.C.D.S. only females. Therefore, the data indicate WK/EX only females hold a more positive attitude toward peers.

A series of analyses of variance were computed, within each group controlling for sex, across all subscales of the School Sentiment Index. Non-significant f-values were obtained for the WK/EX and L.C.D.S., WK/EX only, and L.C.D.S. only groups. However, within the WK/EX only and the L.C.D.S. only groups, on the Teacher subscale, the f-values (.071) (.085) did approach significance. Consequently, there was a difference in attitudes toward teachers, between males and females, in both groups although this difference was not statistically significant.

TABLE 11

Analysis of Variance For The Peer Subscale of The S.S.I.  
For Females By Group

| Source of Variation | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
|---------------------|------|----------------|--------------|-------|--------------|
| Between Groups      | 3    | 76.9141        | 25.6380      | 3.337 | .028*        |
| Within Groups       | 41   | 315.0000       | 7.6829       |       |              |
| Total               | 44   | 391.9141       |              |       |              |

\* Statistically significant at the .05 level

Within the control group, significant f-values at the .05 level were detected on the Teacher and General subscales indicating males and females differ significantly in their attitudes toward teachers and the notion of school in general. The results of the analysis are presented in Table 12.

Inspection of the means show that males have a significantly better attitude toward teachers than do females. Conversely, on the General subscale, the trend is reversed, indicating females have a better attitude toward the overall notion of school in general.

TABLE 12

Analysis of Variance For The Teacher And General Subscales  
of The S.S.I. For The Control Group By Sex

| Subscale: Teacher   |      |                |              |       |              |
|---------------------|------|----------------|--------------|-------|--------------|
| Source of Variation | D.F. | Sum of Squares | Mean Squares | F     | Signif. of F |
| Between Groups      | 1    | 985.2500       | 985.2500     | 6.039 | .019*        |
| Within Groups       | 32   | 5220.9375      | 163.1543     |       |              |
| Total               | 33   | 6206.1875      |              |       |              |

TABLE 12 - continued

| -----               |      |                   |                 |       |                 |
|---------------------|------|-------------------|-----------------|-------|-----------------|
| Subscale: General   |      |                   |                 |       |                 |
| Source of Variation | D.F. | Sum of<br>Squares | Mean<br>Squares | F     | Signif.<br>of F |
| Between Groups      | 1    | 121.9570          | 121.9570        | 4.312 | .044*           |
| Within Groups       | 32   | 904.9883          | 28.2809         |       |                 |
| Total               | 33   | 1026.9453         |                 |       |                 |
| =====               |      |                   |                 |       |                 |

\* Statistically significant at the .05 level

## CHAPTER IV

### PROJECT EVALUATION

#### Introduction

A continuous process evaluation was conducted during the course of the project by project staff, project officer, and an advisory committee. Additionally, three external consultants were employed for advisory and initial formative and mid-process evaluative purposes.

#### Advisory Committee

The advisory committee was composed of a representative from the Division of Guidance Services, Department of Education; a representative from the Practical Arts Education Unit, Bureau of Vocational Education; three university work experience sponsors; a representative from the university Guidance and Counseling Department; one Junior High Guidance Counselor; the Junior High Principal; and all project staff members.

The advisory committee met on November 25, 1975 and on April 6, 1976. During these meetings the project staff summarized results to date and presented the committee with an overview of the project. The committee then made suggestions and offered advice for solving existing programmatic complications. See Appendix F for packet given to all committee members.

#### External Evaluation

Two external evaluations occurred during the conduct of the project. One evaluation was designed to examine the work experience component of the study; the second evaluation was designed to examine the LCDS component of the study.

##### (1) Work Experience Mid-Process Evaluation

The third-party evaluation was conducted in mid December, 1975 by Mr. Mark Newton, an independent consultant with expertise in the area of work experience programs. The evaluator conducted interviews with all members of the program staff, administrators, counselors, and personnel at the Bowling Green Junior High School, reviewed project objectives, time schedules, supporting documents and materials, and provided project personnel an exit conference regarding findings and suggestions.

Observations and recommendations included in the written report may be found on the following page (see Appendix G for full report):

#### Observations:

The school principal feels the greatest attribute of the work experience program to be its potential for offering pupils exposure to more career areas in a real work situation, thereby broadening their data base for future career decision making. The ninth grade guidance counselor agrees, and feels the work experience component has additional potential for strengthening the effectiveness of her group-guidance program.

School personnel foresee management variables as posing the greatest potential problem regarding implementing the work experience component. The factors of pupil scheduling and time constraints were indicated to be areas of primary concern. Two home rooms will participate in the work experience component while two home rooms will remain at the junior high. The pupils in the two home rooms remaining at the school will be attending their regular classes. Consequently, teachers will not be as free to visit work stations at the university as they would have if all pupils were participating.

The principal indicated that the teachers are very supportive of the work experience component to this point and are eager to participate.

#### Recommendations:

Based upon the evaluator's findings, the following suggestions are offered to facilitate the continued planning, implementation, and effectiveness of the project:

1. Final negotiations for work experience stations and sponsors should be effected as soon as possible.
2. Parents of pupils who have been selected for participation in the work experience component should be informed of such and their permission obtained as soon as possible.
3. A mechanism that allows pupils to decline initial and subsequent participation in both the LCDS and work experience component should be developed.
4. A strategy should be developed, whereby teachers at the participating school can visit and observe their pupils on the job. Consideration could be given to periodic voluntary staff exchanges between the university and the participating school.
5. Work experience sponsors should be provided with an opportunity to visit the participating school and become familiar with its program.

6. The modules comprising the LCDS should be systematically monitored so as to determine which are most and least stimulating and relevant to ninth grade pupils.
7. Work experience sponsors should be periodically monitored in an effort to insure that pupils are being provided with as many activity based work experiences as possible.
8. Both the project staff and supporting local school staff should maintain the same degree of esprit de corps evidenced to date.

## (2) Life Career Development System Process Evaluation

Dr. Garry R. Walz and Dr. Libby Benjamin, the creators of the LCDS, served as consultant/evaluators for the LCDS component of the project. During the month of March, 1976 the evaluators made an on-site visit to interview project staff and observe the LCDS in operation at the Junior High. See Appendix H for the full report.

The evaluators focused on two aspects of the study: a) Evaluation Design and Activities and b) The LCDS Facilitation.

Observations, recommendations, and project reactions concerning the LCDS were as follows:

- |                   |                                                                                                                                                                                                                                                                                      |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Observation #1.   | The adequacy of the criterion measures to assess the hypothesized changes in career maturity and attitude toward school are of some concern.                                                                                                                                         |
| Recommendation:   | Instead of utilizing commercial instruments to measure the development of career maturity and attitude toward school, the evaluators recommend developing a performance measure of actual knowledge and skills in such areas as decision-making, problem solving, goal setting, etc. |
| Resulting Action: | The development of descriptive parent, student, sponsor, and teacher survey instruments occurred and although the instruments were not utilized to assess change, they were valuable in analyzing the "total picture" along with the commercial instruments.                         |
| Observation #2.   | The LCDS participants at best are reluctant, and possibly overtly negative, at having to give up their free time period for an activity which may even call for additional work. Because of the limited time available to provide experiences in                                     |

the LCDS, it is apparent that the participants may receive no more than two-thirds of the total LCDS program. This may be a particular problem in that it is the concluding modules that provide for the synthesis and integration of knowledge and skills gained in the earlier modules.

**Recommendation:** It is our view that this first time through may be viewed more as a pilot-testing of the system. We recommend using the LCDS when a larger "block of time" is available for full use of the total system.

**Resulting Action:** The LCDS was terminated after completion of four modules. Upon conferring with the Principal of the Junior High, the Counselors at the Junior High, and the students themselves, it was apparent that the time constraint had created an unreceptive atmosphere for the continuance of the LCDS. Thus, any analysis of individual and interactive effects of the LCDS must take the partial treatment of the LCDS into account.

#### Internal Evaluation

The project staff assumed the responsibility of conducting an internal evaluation of the project.

Data were collected by means of a series of standardized instruments and a series of survey instruments developed by the project staff. The standardized instruments consisted of the Ohio Vocational Interest Survey (which was used for placement purposes and explaining career interests only), Career Maturity Inventory (CMI), and the School Sentiment Index (SSI), the results of which have been previously discussed.

Four survey instruments were developed to collect data from the experimental group subjects, their parents, their sponsors, and their teachers. All survey instruments followed the same basic format. The instruments consisted of a number of statements and response choices pertaining to the program. The Likert Method was employed for the response choices appearing on the survey instruments. Responses were scored on a scale from one to five, with the higher response being the more favorable toward the program. The results of the four survey instruments are reported in Tables 13 through 16.

#### Work Experience Evaluation By Sponsors

Table 13 reveals the results of a sponsor evaluation survey conducted immediately following the completion of the program. The

TABLE 13  
SPONSOR SURVEY

| Item                                                                                                      | Mean | Absolute Frequency |    |   |    |    | Cumulative Frequency (%) |      |        |
|-----------------------------------------------------------------------------------------------------------|------|--------------------|----|---|----|----|--------------------------|------|--------|
|                                                                                                           |      | SA                 | A  | U | D  | SD | SA + A                   | U    | D + SD |
| 1. I understand the purpose of this program.                                                              | 4.31 | 14                 | 14 | 4 | -  | -  | 87.5                     | 14.3 | 0      |
| 2. The information I received concerning the program was adequate.                                        | 4.06 | 9                  | 19 | 1 | 3  | -  | 87.5                     | 3.6  | 9.3    |
| 3. The student(s) I sponsored were difficult to control.*                                                 | 4.53 | -                  | -  | 1 | 13 | 18 | 0                        | 3.6  | 96.8   |
| 4. I could have offered the students better experiences if they had come on different days.*              | 3.53 | 2                  | 5  | 3 | 18 | 4  | 21.9                     | 9.3  | 68.8   |
| 5. I could have offered the students better experiences if they had come at a different time of the day.* | 3.59 | 2                  | 4  | 4 | 17 | 5  | 18.8                     | 12.5 | 68.8   |
| 6. My type of work allows me to offer good experiences for the students.                                  | 3.81 | 5                  | 18 | 5 | 4  | 2  | 71.9                     | 15.6 | 18.8   |
| 7. It is hard for me to see what benefit the program has for junior high school students.*                | 3.97 | -                  | 4  | 2 | 17 | 9  | 12.5                     | 6.3  | 81.3   |
| 8. My superior was supportive of this program.                                                            | 4.31 | 13                 | 16 | 3 | -  | -  | 90.6                     | 9.3  | 0      |

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TABLE 13 Sponsor Survey (cont.)

| Item                                                                                                       | Mean | Absolute Frequency |    |    |    |    | Cumulative Frequency (%) |      |        |
|------------------------------------------------------------------------------------------------------------|------|--------------------|----|----|----|----|--------------------------|------|--------|
|                                                                                                            |      | SA                 | A  | U  | D  | SD | SA + A                   | U    | D + SD |
| 9. There was good communication between project staff and sponsors.                                        | 4.13 | 8                  | 20 | 4  | -  | -  | 87.5                     | 12.5 | 0      |
| 10. I could have offered better experiences if I had fewer students assigned to me.*                       | 3.91 | -                  | 4  | 2  | 19 | 7  | 12.5                     | 6.3  | 81.3   |
| 11. Two days are adequate for the student to gain a good understanding of my career area.                  | 3.16 | 7                  | 9  | 4  | 6  | 6  | 50.0                     | 12.5 | 37.5   |
| 12. My students seemed bored after the first day.*                                                         | 3.00 | 4                  | 7  | 8  | 11 | 2  | 34.4                     | 25.0 | 40.6   |
| 13. Two days is not enough time for the student to have a good understanding of my career area.*           | 3.38 | 3                  | 8  | 2  | 12 | 7  | 34.4                     | 6.3  | 59.4   |
| 14. My students actually helped me with my work.                                                           | 2.69 | 1                  | 11 | 4  | 9  | 7  | 37.5                     | 12.5 | 50.0   |
| 15. This program should be continued on a regular basis.                                                   | 2.47 | 8                  | 7  | 11 | 4  | 2  | 46.9                     | 34.4 | 18.8   |
| 16. My students were polite.                                                                               | 4.44 | 15                 | 16 | 1  | -  | -  | 96.9                     | 3.1  | 0      |
| 17. An information exchange network should be developed between career sponsors and junior high teachers.* | 2.75 | 2                  | 10 | 15 | 4  | 1  | 37.5                     | 46.9 | 15.6   |

TABLE 13 Sponsor Survey (cont.)

| Item                                                                                                                          | Mean | Absolute Frequency |    |    |   |    | Cumulative Frequency (%) |      |        |
|-------------------------------------------------------------------------------------------------------------------------------|------|--------------------|----|----|---|----|--------------------------|------|--------|
|                                                                                                                               |      | SA                 | A  | U  | D | SD | SA + A                   | U    | D + SD |
| 18. My students were interested in my career area.                                                                            | 3.44 | -                  | 18 | 9  | 4 | 3  | 56.3                     | 28.1 | 21.8   |
| 19. I am supportive of this program.                                                                                          | 3.84 | 9                  | 12 | 9  | 1 | 1  | 65.6                     | 28.1 | 6.3    |
| 20. It would have been beneficial for me to have visited the junior high to see their career education program in operation.* | 2.94 | 4                  | 7  | 11 | 7 | 3  | 34.4                     | 34.4 | 31.3   |

\* = Negative Items

N = 32

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TABLE 14  
STUDENT SURVEY

| Item                                                                                     | Mean | Cumulative Frequency (%) |      |        |
|------------------------------------------------------------------------------------------|------|--------------------------|------|--------|
|                                                                                          |      | SA + A                   | U    | D + SD |
| 1. I learned something new about the world of work.                                      |      |                          |      |        |
| WE Group*                                                                                | 3.91 | 77.1                     | 8.6  | 14.3   |
| LCDS Group**                                                                             | 4.25 | 88.9                     | 5.6  | 5.6    |
| Com. Group***                                                                            | 4.07 | 83.1                     | 7.0  | 9.9    |
| 2. This program has helped me to better understand what kind of work I would like to do. |      |                          |      |        |
| WE Group                                                                                 | 3.77 | 71.4                     | 11.4 | 17.1   |
| LCDS Group                                                                               | 3.83 | 75.0                     | 13.9 | 11.1   |
| Com. Group                                                                               | 3.80 | 73.2                     | 12.7 | 14.1   |
| 3. I learned more about what skills are necessary to get a job in the area I explored.   |      |                          |      |        |
| WE Group                                                                                 | 3.89 | 80.0                     | 11.4 | 8.6    |
| LCDS Group                                                                               | 3.58 | 63.9                     | 13.9 | 22.2   |
| Com. Group                                                                               | 3.73 | 71.8                     | 12.7 | 15.5   |
| 4. My experiences helped me to see why it is important to stay in school.                |      |                          |      |        |
| WE Group                                                                                 | 3.83 | 77.1                     | 11.4 | 11.4   |
| LCDS Group                                                                               | 4.22 | 91.7                     | 2.8  | 5.6    |
| Com. Group                                                                               | 4.03 | 84.5                     | 7.0  | 8.5    |

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TABLE 14 Student Survey (cont.)

| Item                                                                                                    | Mean | Cumulative Frequency (%) |      |        |
|---------------------------------------------------------------------------------------------------------|------|--------------------------|------|--------|
|                                                                                                         |      | SA + A                   | U    | D + SD |
| 5. I have learned a lot about what different jobs and careers are like since coming to Western.         |      |                          |      |        |
| WE Group                                                                                                | 3.77 | 74.3                     | 6.7  | 20.0   |
| LCDS Group                                                                                              | 4.19 | 88.9                     | 11.1 | 0      |
| Com. Group                                                                                              | 3.99 | 81.7                     | 8.5  | 9.9    |
| 41 6. This kind of program would be good for other ninth grade students.                                |      |                          |      |        |
| WE Group                                                                                                | 4.31 | 91.4                     | 0    | 8.6    |
| LCDS Group                                                                                              | 4.47 | 94.4                     | 2.8  | 2.8    |
| Com. Group                                                                                              | 4.39 | 93.0                     | 1.4  | 5.6    |
| 7. I have enjoyed my experiences at Western.                                                            |      |                          |      |        |
| WE Group                                                                                                | 4.23 | 85.7                     | 5.7  | 8.6    |
| LCDS Group                                                                                              | 4.22 | 83.3                     | 11.1 | 5.6    |
| Com. Group                                                                                              | 4.23 | 84.5                     | 8.5  | 7.0    |
| 8. My career sponsors at Western have been helpful in showing me what the world of work is really like. |      |                          |      |        |
| WE Group                                                                                                | 3.89 | 77.1                     | 8.6  | 14.3   |
| LCDS Group                                                                                              | 4.11 | 80.6                     | 11.1 | 5.6    |
| Com. Group                                                                                              | 4.00 | 78.9                     | 11.3 | 9.9    |

TABLE 14 Student Survey (cont.)

| Item                                                                                                | Mean | Cumulative Frequency (%) |      |        |
|-----------------------------------------------------------------------------------------------------|------|--------------------------|------|--------|
|                                                                                                     |      | SA + A                   | U    | D + SD |
| 9. My career sponsors at Western were interested in me.                                             |      |                          |      |        |
| WE Group                                                                                            | 3.66 | 62.9                     | 22.9 | 14.3   |
| LCDS Group                                                                                          | 3.81 | 69.4                     | 19.4 | 11.1   |
| Com. Group                                                                                          | 3.73 | 66.2                     | 21.1 | 12.7   |
| 10. If this program had been offered on a voluntary basis, I still would have asked to participate. |      |                          |      |        |
| WE Group                                                                                            | 4.11 | 82.9                     | 5.7  | 11.4   |
| LCDS Group                                                                                          | 4.25 | 86.1                     | 8.3  | 5.6    |
| Com. Group                                                                                          | 4.18 | 84.5                     | 7.0  | 8.5    |
| 11. I enjoyed working in, and exploring the career areas in which I was placed.                     |      |                          |      |        |
| WE Group                                                                                            | 3.94 | 80.0                     | 5.7  | 14.3   |
| LCDS Group                                                                                          | 3.94 | 77.7                     | 13.9 | 8.3    |
| Com. Group                                                                                          | 3.94 | 78.9                     | 9.9  | 11.3   |
| 12. My career sponsors at Western helped me to learn as much as I could about their careers.        |      |                          |      |        |
| WE Group                                                                                            | 3.86 | 74.3                     | 8.6  | 17.1   |
| LCDS Group                                                                                          | 4.08 | 86.1                     | 8.3  | 5.6    |
| Com. Group                                                                                          | 3.97 | 80.3                     | 8.5  | 11.3   |

TABLE 14 Student Survey (cont.)

| Item                                                                                                                        | Mean | Cumulative Frequency (%) |      |        |
|-----------------------------------------------------------------------------------------------------------------------------|------|--------------------------|------|--------|
|                                                                                                                             |      | SA + A                   | U    | D + SD |
| 13. I liked my career sponsors at Western.                                                                                  |      |                          |      |        |
| WE Group                                                                                                                    | 4.03 | 77.1                     | 17.1 | 5.7    |
| LCDS Group                                                                                                                  | 4.14 | 88.9                     | 5.6  | 5.6    |
| Com. Group                                                                                                                  | 4.08 | 83.1                     | 11.3 | 5.6    |
| 14. This program has helped me to understand why my classes at the junior high are important for the career field I choose. |      |                          |      |        |
| WE Group                                                                                                                    | 3.74 | 65.7                     | 20.0 | 14.3   |
| LCDS Group                                                                                                                  | 3.92 | 77.7                     | 13.9 | 8.3    |
| Com. Group                                                                                                                  | 3.83 | 71.8                     | 16.9 | 11.3   |
| 15. I understand why I was placed in the career areas in which I was working/exploring.                                     |      |                          |      |        |
| WE Group                                                                                                                    | 3.63 | 71.4                     | 11.4 | 17.1   |
| LCDS Group                                                                                                                  | 3.69 | 69.4                     | 16.7 | 13.9   |
| Com. Group                                                                                                                  | 3.66 | 70.4                     | 14.1 | 15.5   |
| 16. My career sponsor(s) let me do things instead of just watching.                                                         |      |                          |      |        |
| WE Group                                                                                                                    | 4.03 | 82.9                     | 5.7  | 11.4   |
| LCDS Group                                                                                                                  | 4.19 | 83.3                     | 8.3  | 8.3    |
| Com. Group                                                                                                                  | 4.11 | 83.1                     | 7.0  | 9.9    |

TABLE 14 Student Survey (cont.)

| Item                                                              | Mean | Cumulative Frequency (%) |      |        |
|-------------------------------------------------------------------|------|--------------------------|------|--------|
|                                                                   |      | SA + A                   | U    | D + SD |
| 17. I talked to my parents about the things I did at Western.     |      |                          |      |        |
| WE Group                                                          | 4.09 | 88.6                     | 0    | 11.4   |
| LCDS Group                                                        | 4.00 | 83.3                     | 0    | 16.7   |
| Com. Group                                                        | 4.04 | 85.9                     | 0    | 14.1   |
| 18. I talked to my teachers about the things I did at Western.    |      |                          |      |        |
| WE Group                                                          | 2.66 | 31.4                     | 5.7  | 62.9   |
| LCDS Group                                                        | 3.19 | 44.4                     | 11.1 | 44.4   |
| Com. Group                                                        | 2.93 | 38.0                     | 8.5  | 53.5   |
| 19. The program staff members (other than sponsors) were helpful. |      |                          |      |        |
| WE Group                                                          | 3.91 | 80.0                     | 8.6  | 11.4   |
| LCDS Group                                                        | 3.75 | 72.2                     | 13.9 | 13.9   |
| Com. Group                                                        | 3.83 | 76.1                     | 11.3 | 12.7   |

\*Work Experience Only Group (N = 35)

\*\*Work Experience and LCDS Group (N = 36)

\*\*\*Combined Groups (N = 71)

TABLE 15  
PARENT SURVEY

| Item                                                                                             | Mean | Absolute Frequency |    |    |    |    | Cumulative Frequency (%) |      |        |
|--------------------------------------------------------------------------------------------------|------|--------------------|----|----|----|----|--------------------------|------|--------|
|                                                                                                  |      | SA                 | A  | U  | D  | SD | SA + A                   | U    | D + SD |
| 1. My child talked to me about the things he/she did at Western Kentucky University.             | 4.39 | 18                 | 22 | 0  | 1  | 0  | 97.6                     | 0    | 2.4    |
| 2. My child enjoyed his/her experience at Western Kentucky University.                           | 4.09 | 17                 | 18 | 2  | 1  | 3  | 85.4                     | 4.8  | 9.8    |
| 45 3. I think the things my child did at Western Kentucky University were important.             | 4.29 | 22                 | 13 | 4  | 0  | 2  | 85.4                     | 9.8  | 4.8    |
| 4. Overall, I feel my child has benefited from this program.                                     | 4.15 | 17                 | 17 | 5  | 0  | 2  | 82.9                     | 12.3 | 4.8    |
| 5. I had feelings of concern about my child being on the campus of Western Kentucky University.* | 3.34 | 4                  | 10 | 6  | 10 | 11 | 34.2                     | 14.6 | 51.2   |
| 6. My child seems more interested in school since the program began.                             | 3.10 | 6                  | 11 | 10 | 9  | 5  | 41.5                     | 24.4 | 34.2   |
| 7. My child has talked about the future occupational goals since the program began.              | 3.68 | 10                 | 19 | 4  | 5  | 3  | 70.7                     | 9.8  | 19.5   |
| 8. Exploring different careers is a waste of my child's time.*                                   | 4.39 | 2                  | 1  | 2  | 10 | 26 | 7.3                      | 4.8  | 87.8   |

TABLE 15 Parent Survey (cont.)

| Item                                                                                              | Mean | Absolute Frequency |    |   |    |    | Cumulative Frequency (%) |     |        |
|---------------------------------------------------------------------------------------------------|------|--------------------|----|---|----|----|--------------------------|-----|--------|
|                                                                                                   |      | SA                 | A  | U | D  | SD | SA + A                   | U   | D + SD |
| 9. I understand what the work experience program was about and what it was trying to do.          | 4.10 | 9                  | 29 | 2 | 0  | 1  | 92.7                     | 4.8 | 2.4    |
| 10. I think exploring careers makes school more meaningful for my child.                          | 4.32 | 20                 | 17 | 2 | 1  | 1  | 90.2                     | 4.8 | 4.8    |
| 11. I think schools should stick only to the basic subjects of reading, writing, and arithmetic.* | 4.44 | 2                  | 1  | 2 | 12 | 24 | 7.3                      | 4.8 | 87.8   |
| 12. The program at Western Kentucky University was a waste of time.                               | 4.44 | 2                  | 0  | 3 | 9  | 27 | 4.8                      | 7.3 | 87.8   |
| 13. I think the ninth grade is too early for students to begin exploring careers.*                | 4.46 | 1                  | 0  | 3 | 12 | 25 | 2.4                      | 7.3 | 90.2   |
| 14. I would like to know more about the program.                                                  | 3.90 | 8                  | 25 | 4 | 4  | 0  | 80.5                     | 9.8 | 9.8    |
| 15. I feel my child was really interested in the career areas he or she explored while on campus. | 3.98 | 13                 | 22 | 1 | 2  | 3  | 85.4                     | 2.4 | 12.2   |

\* = Negative Items  
N = 41

TABLE 16  
TEACHER QUESTIONNAIRE

| Item                                                                                                  | Mean | Absolute Frequency |   |   |   |    | Cumulative Frequency (%) |     |        |
|-------------------------------------------------------------------------------------------------------|------|--------------------|---|---|---|----|--------------------------|-----|--------|
|                                                                                                       |      | SA                 | A | U | D | SD | SA + A                   | U   | D + SD |
| 1. The students benefited from the work experience program.                                           | 3.25 | -                  | 1 | 3 | - | -  | 25                       | 75  | 0      |
| 2. The program interfered too much with other studies.*                                               | 2.00 | 2                  | 1 | - | 1 | -  | 75                       | 0   | 25     |
| 3. The program will be of value to students as they enter high school and select courses of study.    | 3.50 | -                  | 2 | 2 | - | -  | 50                       | 50  | 0      |
| 4. The students seemed to enjoy the program.                                                          | 4.00 | -                  | 4 | - | - | -  | 100                      | 0   | 0      |
| 5. The students talked positively about what they did in their work experience stations.              | 3.50 | -                  | 3 | - | 1 | -  | 75                       | 0   | 25     |
| 6. The work experienced on campus by the students was representative of the real world of work.       | 3.00 | -                  | - | 4 | - | -  | 0                        | 100 | 0      |
| 7. I have observed a general improvement in student attitude toward school since the program started. | 1.75 | -                  | - | - | 3 | -  | 0                        | 0   | 100    |
| 8. I was not provided with enough information about the program.*                                     | 3.00 | -                  | 2 | - | 2 | -  | 50                       | 0   | 50     |

TABLE 16 Teacher Questionnaire (cont.)

| Item                                                                                                                                                            | Mean | Absolute Frequency |   |   |   |    | Cumulative Frequency (%) |    |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------|---|---|---|----|--------------------------|----|--------|
|                                                                                                                                                                 |      | SA                 | A | U | D | SD | SA + A                   | U  | D + SD |
| 9. There were poor communications between the project staff and the teachers.*                                                                                  | 3.00 | -                  | 2 | - | 2 | -  | 50                       | 0  | 50     |
| 10. Students were placed in career areas which seemed appropriate for the individual.                                                                           | 3.50 | -                  | 3 | - | 1 | -  | 75                       | 0  | 25     |
| 48 11. Work experience sponsors (University employees) and satellite teachers should develop an exchange information system for student growth and improvement. | 3.75 | -                  | 3 | 1 | - | -  | 75                       | 25 | 0      |
| 12. Ninth grade students are too young to participate in meaningful work experiences.*                                                                          | 3.25 | -                  | - | 3 | 1 | -  | 0                        | 75 | 25     |
| 13. This program made school more relevant for the student.                                                                                                     | 3.00 | -                  | 1 | 2 | 1 | -  | 25                       | 50 | 25     |
| 14. This program could easily be adapted to another junior high school setting.                                                                                 | 3.50 | -                  | 2 | 2 | - | -  | 50                       | 50 | 0      |
| 15. Students can sufficiently explore career areas without having to go off the junior high school grounds.*                                                    | 3.50 | -                  | 1 | 1 | 1 | 1  | 25                       | 25 | 50     |
| 65 16. I feel that most parents supported this program.                                                                                                         | 2.75 | -                  | 1 | 1 | 2 | -  | 25                       | 25 | 50     |

TABLE 16 Teacher Questionnaire (cont.)

| Item                                                                                           | Mean | Absolute Frequency |   |   |   |    | Cumulative Frequency (%) |    |        |
|------------------------------------------------------------------------------------------------|------|--------------------|---|---|---|----|--------------------------|----|--------|
|                                                                                                |      | SA                 | A | U | D | SD | SA + A                   | U  | D + SD |
| 17. The academic performance of my students has improved since the initiation of this program. | 2.00 | -                  | - | - | 4 | -  | 0                        | 0  | 100    |
| 18. I think the teachers should have been more involved in the program.*                       | 3.00 | -                  | 2 | - | 2 | -  | 50                       | 0  | 50     |
| 19. I am supportive of this program.                                                           | 2.50 | -                  | 1 | 1 | 1 | 1  | 25                       | 25 | 50     |
| 20. This program has helped the students to see a need to remain in school.                    | 2.50 | -                  | - | 2 | 2 | -  | 0                        | 50 | 50     |
| 21. I feel this program has the support of the school administrators.                          | 3.75 | -                  | 3 | 1 | - | -  | 75                       | 25 | 0      |
| 22. Most ninth grade students are too immature for this type program.*                         | 3.25 | -                  | 1 | 1 | 2 | -  | 25                       | 25 | 50     |
| 23. I feel there should be more communication between the career sponsors and the teachers.*   | 2.75 | 1                  | 1 | - | 2 | -  | 50                       | 0  | 50     |
| 24. It would have been better for me if the program had been conducted on a different day.*    | 4.25 | -                  | - | - | 3 | 1  | 0                        | 0  | 100    |

TABLE 16 Teacher Questionnaire (cont.)

| Item                                                                                                                                                                                                                                    | Mean | Absolute Frequency |   |   |   |    | Cumulative Frequency (%) |   |        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------|---|---|---|----|--------------------------|---|--------|
|                                                                                                                                                                                                                                         |      | SA                 | A | U | D | SD | SA + A                   | U | D + SD |
| 25. Satellite teachers should be available on the University campus during student work experience days.*                                                                                                                               | 3.00 | -                  | 2 | - | 2 | -  | 50                       | 0 | 50     |
| 26. Please list any changes or recommendations that you believe would improve the career exploration program.                                                                                                                           |      |                    |   |   |   |    |                          |   |        |
| Teacher A. Either take the whole Satellite or none at all. Those left behind were resentful. They felt left out--and were. The negative effects of this more than offset any value of the program (which, I am sure, was considerable). |      |                    |   |   |   |    |                          |   |        |
| Teacher B. If program is continued, include all students. I feel that the program is an aid to those participating, but it should be open to all.                                                                                       |      |                    |   |   |   |    |                          |   |        |
| Teacher C. Get all students of a particular Satellite actually involved (those left behind felt they had been shortchanged).                                                                                                            |      |                    |   |   |   |    |                          |   |        |
| Teacher D. (1) All students or none<br>(2) Better supervision                                                                                                                                                                           |      |                    |   |   |   |    |                          |   |        |
| 27. If you have any further comments about the program, please list them below. We are very interested in anything you have to say.                                                                                                     |      |                    |   |   |   |    |                          |   |        |
| Teacher A. My home room was one that did not go to Western. The comments I heard from students were about 90% negative. If a control group is necessary, use another Satellite.                                                         |      |                    |   |   |   |    |                          |   |        |
| Teacher B. I tried to answer my questions as they related to only those involved in the program. An exception would be on questions asking about students not involved.                                                                 |      |                    |   |   |   |    |                          |   |        |

TABLE 16 Teacher Questionnaire (cont.)

I know you have a problem with getting sponsors for a large number of students. This causes participants to be limited. I don't think you can expect a great deal of response in cooperation from students that are excluded from the work experience trips to campus.

Teacher C,D None

\* = Negative Items  
N = 4

survey was mailed to each major sponsor (total 46). In all, 32 (70%) were returned.

While the results from the survey yield a quite favorable response toward the program, there are several items which warrant specific attention. Of particular interest are items 15 and 19. It appears that the majority of sponsors (65%) were supportive of the program, but were somewhat uncertain if it should be continued on a regular basis (item 15). This could be due to sponsor fatigue (a work experience program was conducted with the sponsors the previous school year).

#### Work Experience Component Evaluation By Students

An evaluation survey was administered to all work experience students following the completion of the work experience component. The results of the survey are shown in Table 14.

It is interesting to note that the group receiving both treatments (work experience and LCDS) had a higher mean response on every item except 3, 7, 17, and 19 than the group receiving the treatment of work experience only.

#### Program Evaluation By Parents

Following the completion of the program, parents of all students participating in the work experience component were mailed a survey which contained a self-addressed, self-stamped envelope. After two weeks, parents who had not returned the survey were contacted by telephone and another survey was mailed to them if they requested. Seventy one surveys were mailed; 41 (58%) surveys were returned. Table 15 reveals the results of the survey.

The survey results indicate that parents were very much in favor of the program. Item 6 indicates, however, that a large number of parents were either uncertain or disagree that the program had increased the interest their children had in school, although 41.5% agreed otherwise.

#### Program Evaluation By Teachers

Table 16 displays the results of the Teacher Survey. The four home-room teachers of the four groups show a basically neutral, if not negative, reaction to the program. The majority (75%) of the teachers felt that the program interfered too much with other studies; that student attitude toward school had not increased since the program started (item 7); that an exchange information system between work experience sponsors and teachers should be developed; that the students enjoyed the program; that the students talked positively about what they did in their work experience stations; that students were appropriately

placed in career areas; that the academic performance of the students had not improved since the initiation of the program; that the program was supported administratively; and that a better time frame for conducting the program (a different day) would have been better for the teachers.

The teachers' responses may reflect the attitudes of the non-participating students. This may be seen through the two open ended questions contained in the survey, Item 26 and Item 27. The teachers' comments reflect a compliment in one sense in that more students should have been given the opportunity to participate. Due to the experimental limitations necessarily imposed by research, this was a limitive factor. The results of the Teacher Survey indicate that the teachers felt greater success would have been achieved if the program had been optional to all students. This aspect will be further discussed in the Conclusion and Recommendation Chapter of the report.

## CHAPTER V

### CONCLUSIONS AND RECOMMENDATIONS

#### Conclusions

Conclusions reached upon the completion of the project were based on the development and implementation of a guidance oriented work experience program. The research sought to determine the effects of such a program on ninth grade students' career maturity and attitude toward school. As in all field types of research, the control for all extraneous variables is most improbable if not impossible. The researcher is of the opinion, however, that the results and conclusions of this study may be generalized to junior high settings with similar characteristics and educational backgrounds; generalization to pupils within educational settings that do not offer a career-oriented curriculum is cautioned.

The following conclusions were based upon the programmatic emphasis of the project, i.e., the actual development and implementation of the program.

1. A guidance oriented work experience program was developed and implemented for ninth grade students. It managed many of the barriers that prohibit employment of underage pupils, provided career exploration in a small self contained geographic area, managed a large number of students in the community at one time, and provided life career development activities within the school system.
2. Procedures for implementing the Life Career Development System were established.
3. The effect of the program of guidance and work exposure on the career maturity and attitude toward school was determined.

The following conclusions were based upon results obtained from the Career Maturity Inventory (CMI). The CMI was administered to all experimental and control groups in an attempt to assess the individual and combined effects of the work experience and the guidance component (LCDS) on students' career maturity. The following null hypotheses were not rejected:

1. There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum and career decision-making attitudes of ninth grade students who have not participated in a work-experience guidance curriculum.
2. There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a Life Career Development System and career decision-making attitudes of ninth grade students who have not participated in a Life Career Development System.
3. There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.
4. There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have participated in a Life Career Development System only.
5. There is no significant difference between career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and career decision-making attitudes of ninth grade students who have participated in a work-experience guidance curriculum only.
6. There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum and the career maturity of ninth grade students who have not participated in a work-experience guidance curriculum.
7. There is no significant difference between the career maturity of ninth grade students who have participated in a Life Career Development System and the career maturity of ninth grade students who have not participated in a Life Career Development System.

8. There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.
9. There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have participated in a Life Career Development System only.
10. There is no significant difference between the career maturity of ninth grade students who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the career maturity of ninth grade students who have participated in a work-experience guidance curriculum only.

The following conclusions were based upon results obtained from the School Sentiment Index (SSI). The SSI was administered to all experimental and control subjects immediately following the conclusion of the program in an attempt to measure the individual and combined effects of the work exposure and the LCDS on students' attitudes toward school. There was a significant difference (.01 level) between the group receiving the work experience only and the group receiving the LCDS only relative to their attitude toward peers (a subcategory of the SSI).

The following null hypotheses were not rejected:

11. There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum and the attitudes of ninth grade students toward school who have not participated in a work-experience guidance curriculum.
12. There is no significant difference between the attitudes of ninth grade students toward school who have participated in a Life Career Development System and the attitudes of ninth grade students toward school who have not participated in a Life Career Development System.
13. There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes

of ninth grade students toward school who have not participated in a work-experience guidance curriculum enriched with a Life Career Development System.

14. There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes of ninth grade students toward school who have participated in a Life Career Development System only.
15. There is no significant difference between the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum enriched with a Life Career Development System and the attitudes of ninth grade students toward school who have participated in a work-experience guidance curriculum only.

The following conclusions were based upon evaluative surveys of pupils who participated in the work experience and career guidance program, their parents, their teachers, and their work experience sponsors.

1. Approximately 93 percent of the two groups participating in the work experience component said they felt the program would be good for other ninth grade students.
2. Approximately 84 percent of the students participating in the work experience component said their work experiences helped them to see why it was important to stay in school.
3. Approximately 83 percent of the work experience students agreed they had learned something new about the world of work.
4. Approximately 82 percent of the participating work experience students agreed they had learned a lot about different jobs and careers as a result of the work experience program.
5. Approximately 73 percent of the participating students said the program had helped them understand what kind of work they would like to do.
6. Approximately 90 percent of the responding parents whose children participated in the work experience component felt the ninth grade was not too early for students to begin exploring careers.

7. Approximately 90 percent of the responding parents whose children participated in the work experience component said that exploring careers made school more meaningful for their children.
8. Approximately 83 percent of the responding parents whose children participated in the work experience component felt their children had benefited from the program.
9. All four of the teachers agreed the students enjoyed the program.
10. Three of the four teachers said the students had positive reactions to the program of work/career exploration.
11. All four teachers agreed that a general improvement in student attitude toward school since the program began had not occurred.
12. Two teachers felt the program could easily be adapted to other junior high school settings; the remaining teachers were undecided.
13. All four teachers felt the academic performance of the pupils had not improved since the program began.
14. All four teachers commented the program should be available to all students.
15. Approximately 87 percent of the work experience sponsors said they understood the purpose of the program and that the information received was adequate.
16. Approximately 97 percent of the work experience sponsors said the students were not difficult to control and were polite.
17. Approximately 47 percent of the work experience sponsors felt the program should continue on a regular basis, with 34 percent undecided.
18. Approximately 81 percent of the work experience sponsors said they could have offered better work experiences if fewer students were assigned to them.

### Recommendations

The recommendations which follow are based upon empirical findings, programmatic results, and subjective observations throughout the course of the study:

1. Decision makers at the state and local levels as well as curriculum specialists should strongly consider the implementation of career and work experience programs for the junior/middle school; such implementation should be considered a major vehicle for the facilitation of sound curricular decision-making on the part of junior/middle school students.
2. The program reported herein should be modified to reflect the following changes:
  - a) More time should be given to the development of the sponsor-student training/exploration agreements.
  - b) The program should be optional to all students but mandatory for none.
  - c) The Life Career Development System should be infused into the curriculum from the beginning of the school year and should be a voluntary or an elective course offered for credit (especially at the ninth grade level).
  - d) Involve the teacher to a larger extent in placing students in the career areas.
  - e) Reduce the sponsor-student ratio whenever possible.
  - f) Develop performance-based criterion measures to assess the changes in career maturity and attitude toward school.
3. The program should be repeated (with some modification) in similar self-contained community settings such as military installations, industrial settings, community colleges, etc.
4. Longitudinal research investigation should be conducted to assess and follow the career development of the youth who have participated in work experience programs as compared to youth who have not had such experiences.

### Discussion

In general, the study reported herein should be viewed as a success. By randomly selecting and limiting the number of students who would participate in the program, an attempt was made to achieve representation and to increase generalizability. In so doing, the negative effects on those students not allowed to participate may have bled into the feelings of the teachers. This could have biased the outcome of the study.

The instrumentation utilized to measure change in career maturity and attitude toward school may not have measured the effects of the treatment. Dr. Walz and Dr. Benjamin in their third party evaluation state, "We recommend that you seriously consider the development of a performance measure of actual knowledge and skills . . . We would regard this criterion as a more relevant and precise measure of any changes that may occur as a result of the different treatments than a commercial instrument." Such a measure was not developed due to time and budgetary constraints. However, the commercial instruments were used in conjunction with the project developed descriptive pupil, teacher, parents, and sponsor surveys.

One point has been made clear throughout the operation of this study. The students who were not allowed to participate were very negative about the situation; this was reflected not only in the teachers' attitudes and survey results, but was also reflected in the comments of the parents whose children were excluded. As pointed out in an earlier chapter, this in one sense is complimentary to the program in that more students desired to participate.

APPENDIX A

AN ALTERNATIVE WORK EXPERIENCE/CAREER EXPLORATION  
PROGRAM FOR NINTH GRADE PUPILS

Teacher's Information Sheet

The following information is offered for your consideration:

1) Work Experience Dates:

|             |          |
|-------------|----------|
| February 26 | April 1  |
| March 4     | April 8  |
| March 18    | April 22 |

It should be noted that these dates are all Thursdays and will not conflict with the scheduled breaks for the Junior High or the University.

- 2) Sack lunches will be provided by the Junior High cafeteria. Please insure that those students who wish to bring a sack lunch purchase it prior to leaving for the University. Those students who do not wish to bring a sack lunch will be able to use the cafeteria at the student center on campus.
- 3) One certified substitute teacher will be made available from the University for those Junior High teachers wishing to come to the campus to view the work experience program. Any Uranus Satelite teachers who want to visit the work experience program should contact Mr. Roger Vincent at the Center for Career and Vocational Teacher Education at 745-3441 to make arrangements for a substitute.
- 4) A parent meeting on the Work Experience/Career Exploration Program has been scheduled for February 19, 1976 at 7 P.M. Various aspects of the work experience will be discussed by the program staff and will answer parent questions. The Uranus Satelite teachers are invited to attend.

Any questions that you may have regarding the Work Experience/Career Exploration should be directed to Mr. Roger Vincent at 745-3441.

APPENDIX B

# Bowling Green Junior High School

MRS. SARAH H. LAWS, PRINCIPAL

1141 CENTER STREET

BOWLING GREEN, KENTUCKY 42101

January 27, 1976

Dear Mr. and Mrs. Veitschegger:

Reference: Maria Veitschegger

As you probably know, Bowling Green Junior High School has received national recognition for its excellent program of career education. Now, a new phase has been added to the program. A number of Junior High students will be given the opportunity to learn more about their career interests by exploring them in real life situations.

As part of her guidance program, Maria has been given a career interest survey. The results of the survey will yield a ranking of career areas in which she has shown an interest. From this ranking, Maria will have an opportunity to explore her top career areas. Also, she will have an opportunity to explore the practical arts area she is now studying at the Junior High.

The students will be transported by bus to and from Western on the following days:

February 26

March 4, 18

April 1, 8, 22

The Junior High will prepare a sack lunch so that she can eat while on the campus. Once at Western, she will explore three career areas in which she has shown interest. In other words, this program will allow her to see for herself the actual work setting of at least three careers in which she seems to be interested at this point in her life.

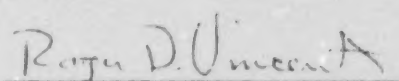
To participate in this program, Maria must either 1) have school insurance; 2) be covered by an individual family policy; or 3) have parental release from accidental injury.

We hope you are willing for Maria to participate in this phase of career education. If so, please fill out the enclosed permission slip and return it in the envelope provided.

If you would like more information concerning the program, you are invited to attend a special meeting for this purpose on February 19, 1976 at 7 PM in the Bowling Green Junior High auditorium.

  
Bowling Green Jr. High Principal

  
Bowling Green Jr. High Guidance Counselor

  
Program Director (WKU Staff)

PERMISSION SLIP

I hereby agree to allow MANIA VEITSCHEGGER to explore career  
(Student Name)  
areas at the Western Kentucky University campus on the days of:

February 26  
March 4, 18  
April 1, 8, 22

I further agree to allow any program related data to be used for re-  
porting purposes, with the understanding that the source will remain anony-  
mous.

Rodney D. Veitschegger  
(Parent Signature)

Please complete 1, 2, or 3.

- 1) My child is covered by a school insurance policy \_\_\_\_\_ (✓)
- 2) My child is covered by a family insurance policy ✓ (✓)
- 3) My child is not covered by a school or family insurance policy; how-  
ever, I, \_\_\_\_\_, release the Bowling Green In-  
(Parent Signature)  
dependent Schools and Western Kentucky University of liability due to  
accidental injury.

APPENDIX C

## Student Work Experience/Career Exploration Plan

The Library Services Department Western Kentucky University, will permit the pupils listed below, from Bowling Green Junior High School, to participate in career exploration activities for the purpose of gaining experiences in the occupational area(s) related to Library Services on the listed dates.  
(Library Services)

Mr. Shann Crawford  
Career Exploration Sponsor

### Tentative Work Experience/Career Exploration Activities

1. Checking in & returning books
2. Assisting patrons
3. Collect fines
4. Orientation to Library Services
5. Lending & replacing Services
- 6.

| Dates    | Feb. 26 and Mar. 4, 1976    | Mar. 18 and Apr. 1, 1976 | Apr. 8 and Apr. 22, 1976 |
|----------|-----------------------------|--------------------------|--------------------------|
| Students | 1. <u>Madeline Harkness</u> | 1. <u>Barbara Hunter</u> | 1. <u>Rita Toney</u>     |
|          | 2. <u>David Hussey</u>      | 2. <u>Holly Hunter</u>   | 2. <u>Danny Morrow</u>   |
|          | 3.                          | 3.                       | 3.                       |
|          | 4.                          | 4.                       | 4.                       |

Each student group will have Work Experience/Career Exploration Activities on both of the above listed dates.

For additional information, see the Sponsor Information Sheet.

## Student Work Experience/Career Exploration Plan

The Biology Department Western Kentucky University, will permit the pupils listed below, from Bowling Green Junior High School, to participate in career exploration activities for the purpose of gaining experiences in the occupational area(s) related to Biology on the listed dates.

E. E. Beal  
Career Exploration Sponsor

## Tentative Work Experience/Career Exploration Activities

1. Interview to Determine Area of Interest
2. Laboratory Tour
3. Dept. tour
4. Identify Educational Requirements
- 5.
- 6.

| Dates    | Feb. 26 and Mar. 4, 1976 | Mar. 18 and Apr. 1, 1976 | Apr. 8 and Apr. 22, 1976 |
|----------|--------------------------|--------------------------|--------------------------|
| Students | 1. David Hildeuth        | 1. Maria Vietach-gyen    | 1. Gary Dunn             |
|          | 2.                       | 2.                       | 2.                       |
|          | 3.                       | 3.                       | 3.                       |
|          | 4.                       | 4.                       | 4.                       |

Each student group will have Work Experience/Career Exploration Activities on both of the above listed dates.

For additional information, see the Sponsor Information Sheet.

# Student Work Experience/Career Exploration Plan

The Dental Hygiene Department Western Kentucky University, will permit the pupils listed below, from Bowling Green Junior High School, to participate in career exploration activities for the purpose of gaining experiences in the occupational area(s) related to Dental Services on the listed dates.

Glenn Grogan R.D.H.  
Career Exploration Sponsor

## Tentative Work Experience/Career Exploration Activities

1. Tour of Dept.
2. Duties of the career; job potential, salary
3. Requirements into the program
4. Observe treatment of the patients
5. Instrument/Sterilizer
6. Observe taking X-rays and processing

| Dates    | Feb. <sup>27</sup> <del>26</del> and Mar. <sup>5</sup> <del>4</del> , 1976 | Mar. <sup>19</sup> <del>18</del> and Apr. <sup>2</sup> <del>1</del> , 1976 | Apr. <sup>9</sup> <del>8</del> and Apr. <sup>23</sup> <del>22</del> , 1976 |
|----------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|
| Students | 1. Terry L. Adams                                                          | 1. James Lucas                                                             | 1. Tim Lutes                                                               |
|          | 2. Terry Clark                                                             | 2. John Martin                                                             | 2. Mike Marshall                                                           |
|          | 3.                                                                         | 3.                                                                         | 3. Maria Christensen                                                       |
|          | 4.                                                                         | 4.                                                                         | 4.                                                                         |

Each student group will have Work Experience/Career Exploration Activities on both of the above listed dates.

For additional information, see the Sponsor Information Sheet.

APPENDIX D

AN ALTERNATIVE WORK EXPERIENCE/CAREER EXPLORATION  
PROGRAM FOR NINTH GRADE PUPILS

SPONSOR'S INFORMATION SHEET

We appreciate your willingness to provide career exploration/work experiences for ninth grade pupils attending Bowling Green Junior High School.

A pilot program was conducted last year on our campus. The following "helpful hints" were derived as a consequence of the program pilot:

Helpful Hints for Sponsors

- 1) Many pupils experience some degree of "culture shock" as a part of their initial campus visit. An overt attempt at making pupils feel comfortable and accepted will help allay some anxieties.
- 2) Pupils profit best from participatory (hands-on) experiences.
- 3) The pupils you are sponsoring have demonstrated some degree of interest in your specific career area. As much exploration of your career area as possible (education required, various levels within your career, related careers, your life style, etc.) is very profitable for pupils.
- 4) Pupils profit from an explanation of why the specific career related activities in which they are engaged are of value.
- 5) Remember, 14 year-olds are "active" by nature.
- 6) The time when your pupils break for lunch is your decision. You may wish to negotiate an appropriate time with those you sponsor. Many times pupils like to eat with their peers and report back to their station at a time specified by their sponsor.
- 7) We will contact your office if a pupil you are sponsoring is absent.
- 8) Pupils are to report to their central assembly point in the College of Education at 1:30 each day. At that time they will be transported back to the junior high school by bus.
- 9) If a problem or concern of any nature arises, please contact the program office (3441).

SPONSOR'S INFORMATION SHEET (con't)

Student Arrival Times and Dates

| Date        | Time        | Date     | Time        |
|-------------|-------------|----------|-------------|
| February 26 | 8:30 - 1:30 | April 1  | 8:30 - 1:30 |
| March 4     | 8:30 - 1:30 | April 8  | 8:30 - 1:30 |
| March 18    | 8:30 - 1:30 | April 22 | 8:30 - 1:30 |

Further questions or concerns may be answered by contacting Roger Vincent, Jack Hanel or Don Britt at:

The Center for Career and Vocational  
Teacher Education  
403 College of Education  
Phone: 745-3441

APPENDIX E

### SCHOOL SENTIMENT INDEX

Directions: For each statement, indicate the extent to which you agree or disagree by marking the answer sheet:

- a) if you strongly agree
- b) if you agree
- c) if you disagree
- d) if you strongly disagree

For example:

I. My classes are too easy.

If you disagree with the statement you should mark C on the answer sheet as follows:

1   a   b   c   d

There are no right or wrong answers, so respond to each item as honestly as you can.

1. My teachers rarely explain to me why I deserve the grades I earn on assignments and tests.
2. I do my best in school.
3. My teachers are interested in the things I do outside of school.
4. Each morning I look forward to coming to school.
5. My school has too many rules.
6. My teachers allow students some choice in what they study in class.
7. I often feel rushed and nervous at school.
8. My teachers give assignments that are too difficult.
9. Students here aren't very friendly.
10. My teachers try to make their subjects interesting to me.
11. I hate having to do homework.

12. My teachers are interested in what I have to say.
13. When I'm at school, I'm unhappy.
14. This school is run like a prison.
15. In most of my classes, individual students can choose assignments which are interesting to them.
16. If I did something wrong at school, I know I would get a second chance.
17. My teachers give assignments that are just busy-work.
18. I enjoy working on class projects with other students.
19. My teachers really like their subjects.
20. I would rather learn a new sport than play one I already know.
21. My teachers are personally concerned about me.
22. School depresses me.
23. Whenever I'm called to one of the offices at school, I feel upset.
24. I think there is too much pressure in school.
25. My teachers give me too much work.
26. School is a good place for making friends.
27. My teachers are boring.
28. I like the challenge of a difficult assignment.
29. My teachers don't try to understand young people.
30. I stay home from school whenever I can.
31. My classes are too big.
32. I'm very interested in what goes on at this school.
33. My teachers explain assignments clearly.
34. In school I have to memorize too many facts.
35. The main reason for going to school is to learn.
36. If I had a serious problem, I don't know one teacher in my school I could go to.
37. Students have enough voice in determining how this school is run.
38. My teachers have encouraged me to think for myself.

39. My teachers have been fair to me.
40. I usually don't get involved in many school activities.
41. My teachers won't give me any idea of what will be on their tests.
42. I really like most of the kids at this school.
43. My teachers don't allow me to be creative.
44. Teachers recognize my right to a different opinion.
45. I get tired of listening to my teachers talk all the time.
46. I attend many school events.
47. I like to talk to my teachers after class.
48. I think my teachers are too old-fashioned.
49. I really feel I'm part of my school.
50. My teachers frequently show a lack of preparation.
51. It is difficult for a new student to find friends here.
52. I have a good relationship with most of my teachers.
53. My favorite classes are those in which I learn the most.
54. I would like to go to school all year long.
55. Each September I look forward to the beginning of school.
56. Our school is so large. I often feel lost in the crowd.
57. I usually get the grade I deserve in a class.
58. My teachers are friendly toward the students.
59. I try to do good work in class.
60. My teachers still respect me as a person even when I've done poorly on my school work.
61. I like school better than my friends do.
62. There's no privacy at school.
63. My teachers let me know what is expected of me.
64. I enjoy the social life here.
65. My teachers grade me fairly.

66. There are many closed groups of students here.
67. My teachers like working with young people.
68. I often buy books with my own money.
69. My teachers are too concerned with discipline.
70. I liked school better when I was in elementary school than I do now.
71. At school, other people really care about me.
72. If I thought I could win, I'd like to run for an elected student body office.
73. My teachers will discuss grade changes with me.
74. My teachers just don't care about students if they're not going to college.
75. I do more school work than just what is assigned.
76. Teachers at my school cannot control their classes.
77. My teachers give me individual help willingly.
78. Lunch time at school is not fun.
79. My teachers are often impatient.
80. If I had the choice, I wouldn't go to school at all.
81. My teachers have "pets."
82. My teachers often waste too much time explaining things.
83. I follow the school rules.

APPENDIX F

"A Study to Determine The Effects of a Comprehensive and Experiential System of Vocational Guidance and Career Development on Junior High School Pupils"

ABSTRACT

The College of Education, Western Kentucky University, and the Bowling Green Junior High School propose to enhance the existing career education emphasis in the Bowling Green schools by implementing a Vocational Guidance and Career Development System for junior high school pupils.

A guidance oriented work experience component and the Life/Career Development System will be used as the experimental variables in the program. Two student groups will participate in the modules of the Life/Career Development System during the school year. One of those groups will simultaneously participate in a guidance oriented work experience component during the second semester of the school year. The remaining LCDS group will experience only the LCDS. A third group will experience only the guidance oriented work experience component during the second semester of the school year. A fourth group (control) will experience neither the LCDS nor the guidance oriented work component.

The proposed experimental research will provide evidence as to the effectiveness of providing pupils with vocational guidance experiences which enable them to identify and actively explore work roles through work experience. Evidence will also be offered relative to the effectiveness of enriching exploratory guidance-oriented work experiences with well developed and comprehensive curricular experiences in the form of the Life/Career Development System.

## A G E N D A

|                  |                                                 |                               |
|------------------|-------------------------------------------------|-------------------------------|
| 1:00 - 1:10 P.M. | Welcome                                         | Dr. Norman Ehresman           |
| 1:10 - 1:20 P.M. | Introduction of<br>Participants                 | Roger D. Vincent              |
| 1:20 - 2:00 P.M. | Explanation of<br>Project/Purpose<br>of Meeting | Roger D. Vincent              |
| 2:00 - 3:00 P.M. | Open Discussion                                 | Project Staff<br>Participants |

#### ADVISORY COMMITTEE MEMBERSHIP

Dr. J. Wayne Ashley, Assistant Professor  
Counselor Education  
Western Kentucky University

Ms. Janie Britt, Graduate Assistant  
Department of Secondary Education  
Western Kentucky University

Mrs. Lucy Griffin, Guidance Counselor  
Bowling Green Junior High School

Ms. Sarah Laws, Principal  
Bowling Green Junior High School

Mr. Douglas McKinley, Director  
Practical Arts Education Unit  
Bureau of Vocational Education

Dr. Curtiss Phipps, Director  
Division of Guidance Services  
Department of Education

Dr. Frank Pittman, Associate Professor  
Industrial Education and Technology  
Western Kentucky University

Ms. Sharon Savage  
Dental Hygiene Department  
Western Kentucky University

#### PROJECT STAFF

\*Norman D. Ehresman, Director, Center for Career  
and Vocational Teacher Education  
Western Kentucky University

John Hanel, Staff Assistant, Center for Career  
and Vocational Teacher Education  
Western Kentucky University

Roger D. Vincent, Staff Assistant, Center for Career  
and Vocational Teacher Education  
Western Kentucky University

APPENDIX G

PROCESS EVALUATION OF  
A STUDY TO DETERMINE THE EFFECTS OF A  
COMPREHENSIVE AND EXPERIENTIAL SYSTEM OF  
VOCATIONAL GUIDANCE AND CAREER DEVELOPMENT  
ON JUNIOR HIGH SCHOOL PUPILS

Conducted and Submitted by

Mark Newton

December 1975

## INTRODUCTION

The third party evaluator conducted a process evaluation of "A Study to Determine the Effects of A Comprehensive and Experiential System of Vocational Guidance and Career Development on Junior High School Pupils" in Bowling Green, Kentucky, December 15-19, 1975. It is the intent of this report to provide objective feedback to project personnel that will aid in their assessment of the present status of the project and thus facilitate continued planning and implementation.

The evaluator intended to and accomplished the following:

1. Discussed and subsequently developed a full understanding of the nature and scope of the project from Dr. Norman Ehresman, Project Director and Mr. Roger Vincent, Project Administrator.
2. Interviewed administrators, counselors and other appropriate personnel at Bowling Green Junior High School to fully accomplish number one above and to obtain appropriate data for assessment purposes.
3. Reviewed research project objectives and time schedule with project personnel.
4. Reviewed appropriate supporting documents and materials.
5. Ascertained the present status of the project in regard to progress toward meeting stated objectives.
6. Provided project personnel with a verbal exit conference regarding findings and suggestions.

## PROJECT OBJECTIVES AND FINDINGS

Two categories of objectives were published for the project: general and specific. The general objectives are as follows:

General Objectives:

1. To further develop a comprehensive, experiential vocational guidance curricular system at the ninth grade level possessing two major components:
  - a. a guidance oriented work experience/career exploration program
  - b. the Life Career Development System

2. To test for selected main and interaction effects of a comprehensive, experiential vocational guidance curricular system on ninth grade pupils.

Regarding general objective number one, project personnel have further developed and refined a comprehensive, experiential vocational guidance curricular model for ninth grade pupils. The model possesses both a guidance oriented work experience/career exploration program and The Life Career Development System.

Satisfactory progress toward meeting general objective number two was apparent through the evaluators scrutinization of the project staff's plans and strategies for eventually testing for main and interaction effects. Such plans are consistent with the data analysis techniques originally proposed.

#### Specific Objectives:

The specific prestated component objectives are as follows:

1. To further develop a relevant work experience/career exploration program for ninth grade pupils utilizing all USOE occupational cluster areas.
2. To place ninth grade students as "participant/observers" in career areas in which they have an expressed interest.
3. To facilitate the process of rational career decision making on the part of ninth grade pupils by offering career alternatives for exploration.
4. To assist in the development of desirable work habits, attitudes, and personal traits.
5. To provide exploratory work experiences such that students may move toward or away from career areas in which they believe they have career interests.
6. To test the effects of the guidance oriented work experience component relative to career maturity, attitudes toward school, and vocational interests of ninth grade pupils.

Regarding specific objective number one above, project personnel have developed a work experience/career exploration model that has the potential for offering experiences in all USOE occupational cluster areas. Whether or not all cluster areas will be represented in the operational program is contingent upon the expressed and measured interests of the pupils comprising the experimental group.

Progress toward meeting specific objectives two, three and five was excellent. Project staff have developed a three-pronged strategy for

placing students as participant/observers in three career areas, thereby offering more career alternatives for exploration. Placement will be effected via measured interests, expressed interests, and cluster area being explored at the junior high school. Consequently, pupils will be provided with three work experiences rather than two as originally proposed. Such a deviation from the originally proposed work experience model is theoretically valid and consistent with recommendations made to the project staff by the advisory committee.

Progress toward meeting specific objective number four above was also excellent. The design for meeting this objective included both the work experience component and the following LCDS modules, through which students will matriculate:

1. Exploring Self
2. Determining Values
3. Setting Goals
4. Expanding Options
5. Overcoming Barriers
6. Using Information
7. Working Effectively
8. Thinking Futuristically

Project staff and supporting guidance personnel from Bowling Green Junior High School completed an intensive training program designed to develop competence in the utilization of the LCDS.

Satisfactory progress toward meeting specific objective number six was also apparent to the evaluator. Career maturity will be indexed by the Career Maturity Inventory. Attitude toward school will be assessed by the School Sentiment Index. Vocational interests have already been determined by administering the Ohio Vocational Interest Survey. As was indicated earlier, the project staff has developed appropriate plans for testing effects following the treatment phase of the research.

#### FINDINGS BASED ON SCHEDULE OF EVENTS

The events enumerated below were to have been completed at the time of this evaluation. Each event will be listed followed by the evaluator's findings and/or explanation(s).

##### Event 1--Employ Staff

Findings: Adequate staff for the conduct of the research, to this point, have been employed. The project director, project

administrator, and cooperating support staff from Bowling Green Junior High School constitute an effective team which is congruent with the scope of work required to this point. Additional staff (two graduate assistants) are to be employed during the operational work experience component of the research, primarily for pupil management and testing purposes. The evaluator is of the opinion that their employment is mandatory.

#### Event 2--Establish Advisory Committee

Findings: An advisory committee was established early in the project. The committee met in formal session on November 25, 1975. The advisory committee was comprised of appropriate representatives from Western Kentucky University (vocational teacher educators, counselor educators, pupil work experience sponsors), The Kentucky State Department of Education (Division of Guidance Services and the Practical Arts Unit), Bowling Green Junior High School (principal and guidance counselor).

#### Event 3--Workshop for Life Career Development System Facilitators

Findings: The project administrator and three support personnel completed the necessary training for LCDS facilitators in November 1975. The training was conducted in Ann Arbor, Michigan.

#### Event 4--Selection of Students

Findings: The random selection and assignment of intact groups was utilized in the formulation of experimental and control groups. All students have been selected and assigned appropriately.

#### Event 5--Administration of the Ohio Vocational Interest Survey

Findings: All pupils selected for participation in the work experience component of the research have been administered the Ohio Vocational Interest Survey.

#### Event 6--Secure Training Stations

Findings: The procurement of work (training) stations for pupils selected to participate in the work experience phase of the research has not been completed. Proposals, however, have been developed for the necessary stations. The evaluator is of the opinion that sufficient lead time remains for securing necessary training stations if the activity is deemed as a priority.

#### Event 7--Secure Sponsors

Findings: The procurement of pupil work experience sponsors has not been completed. The evaluator feels that sufficient lead time exists for securing sponsors if the activity is deemed as a priority.

#### Event 8--Transportation and Meals for Work Students Arranged

Findings: A transportation and meal plan for work experience pupils has been developed and adopted by the university and the participating junior high school. Pupils will be transported to and from a central university location by school buses belonging to the Bowling Green City Schools. Project staff and/or teachers of record will accompany students during all transportation periods. The Bowling Green Junior High School will provide sack lunches at standard school lunch rates to pupils who desire to purchase them. Pupils not purchasing sack lunches will be allowed to utilize university facilities for the purchase of lunch. All pupils will be allowed to utilize university cafeteria facilities for the consumption of sack or purchased lunches.

#### Event 9--Ohio Vocational Interest Survey Interpretation

Findings: Interpretations of the results of the Ohio Vocational Interest Survey have been provided all pupils. Interpretation sessions utilized the Understanding Interests Workbook as a technique to foster pupil understanding.

#### Event 10--Integration and Operationalization of the Life Career Development System in Curriculum

Findings: The Life Career Development System was to have been operationalized for two components of the experimental group at the onset of the academic school year. As a consequence of insufficient lead time and unanticipated schedule conflicts regarding required facilitator training for the LCDS, operationalization will not occur until the midpoint of the academic year. Experimental subjects will, however, matriculate through the same number of modules as originally proposed, but in a shorter total period of time. The evaluator feels that such a change does not pose a threat to the research design nor does it lessen the scope of work originally proposed.

#### FINDINGS BASED ON INTERVIEWS CONDUCTED WITH THE PRINCIPAL AND GUIDANCE PERSONNEL OF BOWLING GREEN JUNIOR HIGH SCHOOL

##### Life Career Development System

The school principal and guidance personnel view the LCDS positively and feel it has the potential for strengthening the school's overall

exploration program. Both feel the most efficient strategy for integrating the system into the curriculum is through the existing group-guidance program.

Some concerns were raised regarding ease of integration with respect to time constraints. Typically the participating school provides four group guidance sessions per pupil per year. The LCDS will require 55 forty-five minute sessions.

School personnel feel that the LCDS is as applicable to the pupils in the local school as it is to pupils elsewhere. They indicated, however, that some aspects of some modules might not be appropriate for ninth grade pupils. Their strategy intends to be one of trying out the entire system before making modifications for future utilization.

The principal and guidance personnel feel that because the pupils in the local school are accustomed to group-guidance activities, they will be receptive to the LCDS. No problems regarding pupil-acceptance are anticipated.

The principal indicated that the teachers are receptive to the system, primarily for two reasons. First, the LCDS is consistent with both the school's and school system's educational philosophy and thrust. Secondly, because the LCDS is to be implemented as a function of the group guidance program, responsibility for the system's implementation and operation will not be placed upon classroom teachers.

#### Work Experience Program

The school principal feels the greatest attribute of the work experience program to be its potential for offering pupils exposure to more career areas in a real work situation, thereby broadening their data base for future career decision-making. The ninth grade guidance counselor agrees, and feels the work experience component has additional potential for strengthening the effectiveness of her group-guidance program.

School personnel foresee management variables as posing the greatest potential problem regarding implementing the work experience component. The factors of pupil scheduling and time constraints were indicated to be areas of primary concern. Two home rooms will participate in the work experience component while two home rooms will remain at the junior high. The pupils in the two home rooms remaining at the school will be attending their regular classes. Consequently, teachers will not be as free to visit work stations at the university as they would have if all pupils were participating.

The principal indicated that the teachers are very supportive of the work experience component to this point and are eager to participate

when and where possible. Regarding pupils, those who were selected are anxious to participate. Some concern, however, was expressed by school personnel for pupils who were not selected for participation, but desire to do so.

#### Overall Program

The principal and guidance personnel agree that they have had appropriate input into what will eventually be an operational, but research based, program. No problems were identified regarding input. Additionally, school personnel feel that sufficient and good communications exist between participating local school and university personnel.

#### SUMMARY

This evaluator found that project personnel have done an exceptionally fine job accomplishing what was intended when it was supposed to be accomplished. The fact that final negotiations for necessary work experience stations and sponsors have not been completed should not pose a problem, assuming the completion of such negotiations is deemed as a priority. Unanticipated problems, such as scheduling the LCDS facilitator training, were addressed rationally and resolved efficiently.

Coordination and communication with personnel at the participating school was excellent. Local school personnel evidenced eagerness, enthusiasm, and exceptional cooperation. An overall atmosphere conducive to empirical investigation was most apparent.

#### SUGGESTIONS

Based upon the evaluator's findings, the following suggestions are offered to facilitate the continued planning, implementation, and effectiveness of the project:

1. Final negotiations for work experience stations and sponsors should be effected as soon as possible.
2. Parents of pupils who have been selected for participation in the work experience component should be informed of such and their permission obtained as soon as possible.
3. A mechanism that allows pupils to decline initial and subsequent participation in both the LCDS and work experience component should be developed.
4. A strategy should be developed, whereby teachers at the participating school can visit and observe their pupils on the job. Consideration could be given to periodic voluntary staff exchanges between the university and the participating school.

5. Work experience sponsors should be provided with an opportunity to visit the participating school and become familiar with its program.
6. The modules comprising the ICDE should be systematically monitored so as to determine which are most and least stimulating and relevant to ninth grade pupils.
7. Work experience sponsors should be periodically monitored in an effort to insure that pupils are being provided with as many activity based work experiences as possible.
8. Both the project staff and supporting local school staff should maintain the same degree of esprit de corps evidenced to date.

APPENDIX H

# LIFE CAREER DEVELOPMENT SYSTEM

March 25, 1976

Memo To: Roger Vincent, Project Administrator  
Center for Career and Vocational Teacher Education  
Western Kentucky University, Bowling Green, Kentucky

From: Garry R. Walz and Libby Benjamin

Subject: Consultant Visit to Career Education Project, Western Kentucky University, Bowling Green, Kentucky, March 8-9, 1976.

## Introduction

It was our pleasure to serve as external evaluators to your research project, "A Study to Determine the Effects of a Comprehensive and Experiential System of Vocational Guidance and Career Development on Junior High School Pupils." We believe that you are conducting an impressive bit of action research in which you have attempted both to implement a new project in a junior high school, as well as evaluate its effectiveness. The following report represents our reactions to our visitation and is divided into two parts:

1. Evaluation Design and Activities
2. The LCDS Facilitation

### 1. Evaluation Design and Activities

We concur and are pleased with the evaluation design that you have developed. The four groupings should make for some interesting results at the conclusion of your project. The one real question we have concerns the adequacy of the criterion measures to assess the changes you hypothesize will occur either in the LCDS or the Work Experience treatment. We do recommend that you seriously consider the development of a performance measure of actual knowledge and skills in such areas as decision-making, values, problem-solving, goal-setting, etc. We would regard this criterion as a more relevant and precise measure of any changes that may occur as a result of the different treatments than a commercial instrument.

Both in the research and in the project itself we have concerns about the fact that the participants, at best, are reluctant, and possibly overtly negative, at having to give up their free period for an activity which may even call for additional work. Because of the limited time available to provide experiences in the LCDS, it is apparent that the participants may receive no more than two-thirds of the total LCDS program. This may be a particular problem in that it is the concluding modules that

memo to: R. Vincent  
from: GRW, LB  
March 25, 1976  
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provide for the synthesis and integration of knowledge and skills gained in the earlier modules.

In the analysis, we suggest that you place some focus on the interaction effects between the Work Experience treatment and the LCDS.

## 2. The LCDS Facilitation

First, let us say that it was exciting for us to be back in the classroom and observe students dealing directly with our System. Because our involvement with the field testing occurred many months ago, this was particularly satisfying to us.

We heartily commend you on your idea of having college personnel co-facilitate with present members of the school staff. We note that you are sharing ideas and approaches as you prepare your facilitations, and we endorse this practice with enthusiasm.

So far as specific facilitative suggestions, we do see a need for placing more emphasis on motivational arousal of the students and for capturing their interest at the beginning of the sessions. This responsibility truly lies with the facilitator, and its effective implementation can make all the difference between sessions that can be called successful or not successful. Also, the more the facilitators can move right into the group with whom they are working, even sitting down at their level, the more interaction and response is likely to occur. We noted with approval the use of the blackboard and of written information along with verbal input -- an especially effective way, we believe, of reinforcing the information you wish to impart to the participants.

Generally speaking, facilitation is different from teaching, and requires that facilitators do everything possible to draw comments, inferences, and generalizations from the participants rather than play the traditional role of teacher. We encourage your attempting to involve students just as much as possible as you proceed with your use of the LCDS.

It is our view that this first time through for the LCDS might be viewed more as a pilot-testing of the System. A true field test could occur next fall after the facilitators have had an opportunity to use this spring to gain facilitative skills and familiarity with all parts of the System. Possibly, too, this fall might be a time when the facilitators feel that they will have a block of time which will enable them to make use of the total LCDS to full advantage.

memo to: R. Vincent  
from: GRW, LB  
March 25, 1976  
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Again, we thank you for offering us the opportunity to observe and offer some reactions to your use of the Life Career Development System. We hope that the comments above will be helpful to you in your present and future use with the LCDS.

GRW, LB/jl  
cc: Norman D. Ehresman  
Jack Hanel

1E 004 907